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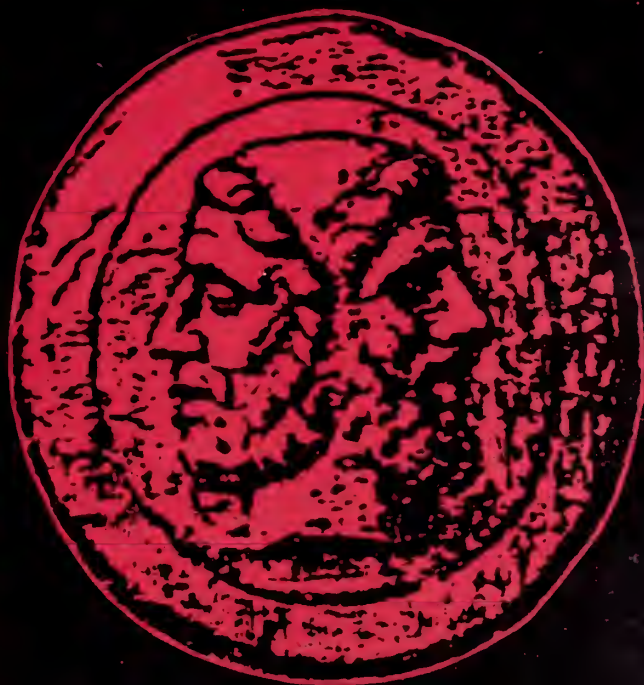
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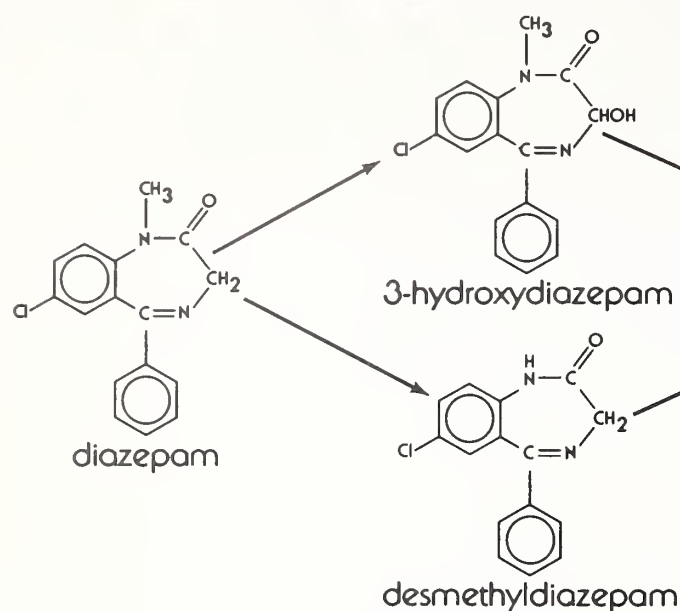
CIRCULATES

Ja'nus (jā'nūs), *n.* [L. See JANITOR; cf. JANUARY.] *Rom. Relig.* An ancient Roman deity, primarily god or, more strictly, *numen* of gates and doors, hence, of all beginnings. In prayers his name was first, and his priest, *Rex sacrorum*, held foremost rank in the pontifical college. The first hour of the day, the calends of each month, and the first month after the winter solstice (*January*) were sacred to him. His feast was the Agonium of Jan. 9. In the Forum was his doubledoored shrine, ascribed to Numa Pompilius, closed only in time of absolute peace. He was represented with two opposite faces, probably symbolizing the two faces of a door. Originally he was probably god of the household door, as Vesta of the hearth. Cf. DL.



Roman As, showing
 Head of Janus.

A pharmacokinetic character all its own



Valium (diazepam) is a benzodiazepine with a distinctive pharmacokinetic profile

The pharmacokinetic profile of Valium is one of the characteristics that sets it apart from other benzodiazepines. Consider, in particular, the metabolic pathway of Valium. The three major metabolites of Valium exhibit significant pharmacologic activity—and so, of course, does the parent substance—diazepam itself. All combine to produce the characteristic clinical response seen with Valium. The response you have come to know, to want and to trust.

Pharmacokinetic studies also demonstrate that Valium has a pattern of absorption, distribution, metabolism and elimination that is reliable and consistent. And, although the pharmacokinetics of a drug cannot, at present, be specifically related to its clinical effects, it is clearly a factor that distinguishes one product from another by providing important insights into how each moves through the patient's body.

Valium® (diazepam) ^{IV}

2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated:

Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma;

may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients.

Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



Roche Laboratories
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MORBUS MEDIAGENICUS

Epidemiologists seem to be totally unaware of what could become one of the most serious pandemics this nation has yet experienced. Their oversight might be explained by their extreme preoccupation with the recently-assassinated swine flu immunization project or it might be due to the fact that, until now, this new malady has not had a name. The purpose of this writing is to call attention to this oversight, name the disease and solicit suggestions concerning the development of control measures.

The name of the disease, in classical Latin is *Morbus mediagenicus*. Its contemporary title is mediagenic disease and it refers to a large group of illnesses which began to appear in this country at about the time the Food and Drug Administration was created. As its name implies, *Morbus mediagenicus* is an illness caused by the news media. It can be transmitted by direct or indirect exposure and appears to be infectious, contagious and highly virulent. Advanced stages of the disease demonstrate protean signs and symptoms and, although complete recovery is rare and morbidity rates are high, fatalities have not yet been confirmed.

In virtually all cases, the cause has proved to be identical: Irresponsible, impulsive, thoughtless and outrageously-distorted reporting of untruths, half-truths and pseudo-facts by the publishing and electronic journalists of the United States of America.

As is the case with other communicable diseases, the pathogen must invade a susceptible host in sufficient strength to overwhelm host-resistance. The host in a case of *Morbus mediagenicus* is any person who is exposed, directly or indirectly, to concentrations of the media-poison sufficient to overcome its own logic, wisdom and innate skepticism. Once established, the disease progresses steadily and remissions are infrequent. It does not, unfortunately, demonstrate a significant immunogenic potential. Fever and leukocytosis are not characteristic host-responses and no antibodies have been identified in the blood or tissues of acutely or chronically ill patients.

Anxiety is the earliest, most universal and most enduring symptom. It can be mild or so severe as to approach panic. It produces the characteristic facies of the disease: A furrowed

OSMA
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brow; hollow, occasionally staring eyes; an expression compounded of shock, fear, anger and disbelief. The anxiety leads but does not give way to the later stages of the disease which frequently induce deterioration of logic and intellect. Thus, a diabetic becomes convinced his case was improperly diagnosed after reading that one of the speakers at a medical meeting does not agree with the traditional diagnostic criteria for diabetes mellitus. Another diabetic stops taking insulin when he reads a news item which suggests that some of the serious complications of diabetes might be the result of an allergy to insulin. A patient with severe hypertension refuses to take an effective antihypertensive drug because she heard a man on television say that such drugs can cause the body to lose excessive amounts of potassium. A woman with a lump in her breast refuses to submit to mammographic study because she read in a magazine that so much x-ray could cause cancer. A man refuses to have a cancerous prostate gland removed because he heard a senator say on the news that a lot of unnecessary surgery is being done in this country. And a hundred-million Americans will be susceptible to a lethal strain of influenza because the media indulged itself with monster-making and some bone-rattling sensationalism.

Morbus mediagenicus is a disease which is laden with ironies. Its causative agent enjoys a freedom guaranteed by its victims while accountability is demanded by none of them. It can neutralize centuries of achievements in the diagnosis, therapy and prevention of disease and replace them with a pandemic neurosis. It is an uncontrollable disease which is producing uncontrollable disease. It is sickening the healthiest people the world has known.

Epidemiologists and clinicians should exercise a high index of suspicion in dealing with this disease. What might appear to be a death from diabetic coma, malignant hypertension, breast cancer, prostatic carcinoma or influenzal encephalitis might, in truth, be a fatal case of *Morbus mediagenicus*. MRJ

You would probably be surprised by the number of out-of-state doctors who seem to be interested in relocating their practices in Oklahoma. The reason . . . we have an active state medical association which has been able to either prevent or soften the blow of many of the problems which burden doctors in other states.



One of the most serious problems which plagues doctors around the country is the cost and availability of professional liability insurance. The problem in most states has worsened materially since last year and threatens to put some doctors out of business. Fortunately this is not the case in Oklahoma.

For years doctors in this state have enjoyed insurance premiums which were among the lowest in the nation. Now the word has apparently gotten around and Oklahoma is being heralded as one of the places to be. The officers and staff are to be congratulated for their foresight, and our Committee on Insurance should be thanked for the many hours they have spent working on our program.

Even though our program has always been one of the best, we have not hesitated to implement changes if they were needed. This year there was reason enough to seek a new company and a new system for insuring the excess limits portion of our professional liability program.

For the last few years Continental National American has insured the insurance layers from \$100,000 up to \$5 million. During that time, no losses were incurred in the excess limits portion which approached the higher figure. In fact, the worst year we have experienced was in 1974, when CNA paid a total of \$397,397. Nevertheless, CNA sought and received a premium increase of between 200 and 300 per cent last year and asked for a comparable increase this year. Our loss experience simply did not justify such an increase, and a new program was negotiated with Lloyd's of London for the first \$1 million layer. We will now pay only 24 per cent more than last year, a small increase considering what CNA had requested.

By switching to Lloyd's, we were also able to retain our occurrence policy which means if you have insurance in 1977 you are covered for any event which might occur during the year, even if the case is not filed until 1987 or later. This type of policy is about three times as valuable as the claims-made

policy which CNA wanted to switch us to. Claims-made policies cover only those claims filed during the policy year. Once the year has ended, your protection has ended.

Complementing our excess limits program is one of the best basic coverage plans in the nation . . . again the occurrence type. This year the cost for this insurance went up only 14 per cent because our insurance counselors convinced the carrier, Insurance Company of North America, that the Stabilization Fund was no longer required. Our rates are about one-half those charged in Colorado, and rates in Texas are nearly four times as high.

Oklahoma is also rare in that coverage above \$1 million can be purchased. Although the rates for this program are higher than those for the INA and Lloyd's programs, we are fortunate that it is available. Coverage above \$1 million is available to only four other sponsored programs, and in some states \$100,000 is the limit.

In addition to the reasonable premiums, several other provisions are unique to the OSMA program. For example:

- *Oklahoma's is one of only five sponsored programs in this country where limits above \$1 million can be purchased *at any price*.

- *Any physician who is cancelled has the right to appeal to the OSMA's Insurance Committee.

- *Neither the rates nor the policy form can be changed without six months written notice from the insurer. Likewise, the program cannot be cancelled by the insurer without six months notice.

- *Information on all losses is furnished to the OSMA. This protects you from unwarranted rate hikes and allows the OSMA to keep up-to-date on Oklahoma trends.

- *INA has only one professional liability account left, and that is with Oklahoma doctors.

- *Oklahoma is one of only two states remaining on the five class system. A change to ISO's 29 class system would cost you much more in administration fees, and would leave so few doctors in each class that loss information would be virtually meaningless.

It is obvious to me that having the lowest rates in the nation, being one of only five states with coverage above \$1 million dollars and having so many safeguards to protect us is no accident . . . it is the result of a lot of hard work and planning. The OSMA Committee on Insurance has been resourceful and innovative. They have changed our program when necessary and have improved it when possible and in some instances even when it was impossible.

This year once again we can say, "We have the finest professional liability insurance program in the nation."

Orange M. Wilburn

Forty-Five Years of Intracranial Surgery in Oklahoma

B. J. RUTLEDGE, MD

Microneurological surgery is the most significant change in technique utilizing the operating microscope, microinstruments, microneedles and suture, bipolar cautery, image intensifier and radiofrequency lesion generators.

Advances in the new specialty of Neurological Surgery had already been made by the time the first neurosurgical practice was established in Oklahoma City (1931) by Doctor Harry Wilkins. After graduating from the University of Oklahoma School of Medicine and completing a fellowship with Doctor Ernest Sachs (Washington University, St. Louis), Doctor Wilkins assumed the responsibilities as the first Chairman of the Department of Neurosurgery at the University of Oklahoma Health Sciences Center. Many advances which have contributed to the neurosurgical armamentarium prior to that time are remarkable. Notably, they are:

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Doctor Harvey Cushing's format for meticulous care of tissue during surgery was based on Halsted's tradition. Doctor Fraser of Philadelphia perfected the retrogasserian neurotomy with the patient in the sitting position for trigeminal neuralgia.¹⁸ The ventriculogram, discovered by Walter Dandy in 1918, was used to localize intracranial tumors.⁶ Doctor Percival Bailey published his classification of gliomas in 1926.² Cerebral angiography was perfected in 1927 by Doctor Egas Moniz, a Portuguese neurologist;¹⁵ this test proved to be more valuable than air studies. Even so, cerebral arteriograms were not performed in Oklahoma City until 1946. Later improvements in multiple exposure roentgenographic techniques resulted in serioscopy, and in 1927, Doctor Hans Berger developed the electroencephalogram (EEG).³ Doctor Cushing and Doctor Bovie reported their experiences with the electrosurgical unit (1928).⁵

In 1956, Doctor Javid introduced clinical urea as an osmotic shrinking agent although mannitol is now the most widely-used agent.¹³ L. A. French (1961) reported the use of dexamethasone in the treatment of cerebral edema associated with brain tumors.⁹ Paul Bucy (1962) described a simple percutaneous brachial artery technique for cerebral angiography.¹⁷ About the same time, Brink-

man and Kahn reported their experience with radionuclide brain-scanning using mercury 203.⁴ Along with these diagnostic techniques and surgical advances, several other factors have influenced the diagnosis and medical care of patients with intracranial disease.

Neuroradiology has expanded into a specialty, as has neuroanesthesiology. Intensive care units and special neurological surgery units have been developed. Respiriologists are consulted to accurately analyze blood gases and supervise inhalation therapy. Physical therapists have also added their expertise, resulting in more rapid functional recovery of patients with neurological deficits. However, during Doctor Wilkins' 35 years of practice in Oklahoma City, there was very little change in the actual technique of intracranial surgery. Hall, a dentist, started perfecting power tools which expedited entrance into the cranial cavity; but no significant technical changes occurred until Doctor M. Gazi Yasargil (Zurich, Switzerland) studied a year in the microvascular laboratory of Doctor Peradon Donaghy of Burlington, Vermont.⁷ Yasargil is well-known for his experimental studies in microsurgical repair and reconstructive surgery of the cerebral arteries,²⁰ improved suturing techniques, as well as developments in the operating microscope.

Microneurosurgical techniques are useful in treating aneurysms, arteriovenous malformations, acoustic neurinomas, pituitary tumors, parasellar tumors and a percentage of other intracranial tumors. Since 1969, tremendous improvements have been made in correcting neurosurgical conditions because of the availability of the operating microscope which magnifies from 6X to 40X. In addition to magnification, the operating microscope pro-

vides constant binocular vision and excellent illumination of the target site. Documentation of the surgical procedure can be accomplished by using 16 mm, 35 mm, or videotaped film. This permits other members of the surgical team to observe the procedure. In addition to the microscope, it is important to have delicate microneurosurgical instruments, microsutures, strong microneedles, and the Malis bipolar electrocoagulator.¹⁴

The morbidity, mortality, and accuracy in occluding intracranial aneurysm have markedly improved through the use of microneurosurgical techniques. Special neuroanesthesia with hypotensive agents, ie, sodium nitroprusside, also contribute to successful treatment. Micro technique allows for a smaller craniotomy opening, less retraction of the brain, and permits the clips to be placed more accurately so that perforating vessels such as the anterior choroidal will not be occluded. The application of bipolar cautery can decrease the size of the neck of an aneurysm so that it will accommodate a surgical clip. The mortality and serious morbidity rate should be less than 5% in those individuals requiring surgery who do not have neurological deficit (grade 1) or systemic disease such as hypertension prior to surgery.

Acoustic neurinomas comprise approximately 9% of all intracranial tumors. In the past these benign tumors could be cured by totally removing the tumors, however, hearing was usually destroyed. Also, the seventh cranial nerve was damaged in 85% of the patients, resulting in facial paralysis. Even though neurotologists have made advances in diagnosing these tumors, posterior fossa myelography must still be performed to definitely exclude them in patients with unexplained nerve deafness. Several surgical approaches have been tried for the removal of these tumors. However, only the suboccipital transmeatal approach can preserve hearing after total removal of the tumor. Seventh nerve function can now be preserved in approximately 85% of these patients. This procedure, a team approach, is performed by a neurosurgeon and an otologist, both skilled in microsurgical techniques.

The pituitary gland is now safely treated by the ororhinotranssphenoidal approach, another application of microneurosurgery. Often in performing this surgery, an otorhinolaryngologist is requested to comprise a team

Since his graduation from the University of Oklahoma College of Medicine in 1948, Bob J. Rutledge, MD, has been certified by the American Board of Neurological Surgery. Clinical Professor in the Department of Neurological Surgery at his school of graduation, Doctor Rutledge is a Fellow of the American College of Surgeons and the International College of Surgeons and a member of the American Association of Neurologic Surgeons, the Congress of Neurosurgeons, the Southern Neurosurgery Society and the Southwestern Surgical Society.

effort. Equipment for this procedure includes the image intensifier and special bayoneted instruments. This approach is preferable when the hypophysis is removed in patients suffering from metastatic carcinoma of the breast or prostate. Regression in patients who had not had the tissue tested for hormonal influence occurs in approximately 40% and regression occurs in approximately 60% of the patients with tumors that are hormonal dependent. However, pain is relieved or markedly improved in over 90% of the patients. The ororhinotranssphenoidal approach is less formidable and more easily tolerated by the patient than the classical transfrontal approach. Large pituitary tumors, restricted to the midline, can be removed and accurately followed for recurrence by using a metal clip as a radiographic tag. If, in follow-up films, the clip is seen to change position, the tumor is likely to be recurrent.

The microneurosurgical technique has also enabled us to perform curative operations on the spinal cord by totally excising intramedullary tumors, such as ependymomas. Arteriovenous malformations on the dorsum of the spinal cord, and intracranial arteriovenous malformations can be managed more satisfactorily than in the past. The use of the bipolar cautery is essential in removing these lesions.

Microneurosurgery has stimulated renewed interest in posterior fossa lesions and has supported a new hypothesis as to the cause of cranial nerve dysfunctions and their surgical treatment. Some neurosurgeons believe that dysfunction of cranial nerves may be caused by vascular compression of the nerve adjacent to the brain stem.^{11, 12} Compression can be caused by an arterial loop, arteriosclerosis, or perhaps a vein. Neural patho-physiology may be due to localized demyelination of the involved nerve. Trigeminal neuralgia is a very painful condition occurring primarily in older patients. The symptoms resulting from this compression can be relieved by placing a plastic strut between the pons and the artery, thereby changing the intimate relationship between the vessel and nerve. Hemifacial spasm can be caused by compression of the seventh cranial nerve (Facial) either by the superior cerebellar artery or the anterior-inferior cerebellar artery. This condition can be corrected by placing the strut between the brain stem and the vessel without touching the nerve.

Symptoms of eighth nerve (Acoustic) involvement include tinnitus, hyperacusis, hearing loss and vertigo. Torticollis can be caused by compression of the eleventh cranial nerve (Spinal accessory) by the posterior-inferior cerebellar artery.

In the past two-and-one-half years, we have treated approximately 40 patients with radio-frequency lesions induced by the percutaneous method, perfected by Doctor William Sweet.¹⁹ Treatment takes place in the Radiology Department with the image intensifier, using Brevital (a very short-acting barbiturate) anesthesia. A 19-gauge needle is inserted through the skin about one inch lateral to the corner of the mouth and is then passed between the maxilla and mandible into the foramen-ovale at the base of the skull. Radiographic measurements are adjusted so that the tip of the needle is adjacent to the first, second, or third posterior divisional fibers behind the Trigeminal ganglion. When the fibers are electrically stimulated, the patient will describe a sensation in the part of his face which is enervated by those particular fibers. After the cannula is correctly located, a thermistor replaces the stimulator. By increasing the temperature from 65° to 80° C for short periods a lesion can be made. The patient is permitted to awaken for tests of any sensory change. It is not necessary to produce total anesthesia for relief of the pain. The main complication of this procedure is injury to the first division with resulting numbness of the eyeball. This method will largely replace the classical procedures of alcohol injections and the retrogasserian neurotomy used for so many years in the treatment of tic douloureux.

Microneurosurgery received its impetus from microvascular surgery. Small blood vessels, one millimeter in diameter, or less can be anastomosed with a high rate of patency. The primary vessels that have been anastomosed are the superficial temporal artery to the middle cerebral artery (STA-MCA). This is a form of extra-cranial-intracranial bypass (ECICB). Other vessels such as the occipital artery to the middle cerebral or the occipital to the posterior-inferior cerebellar artery have been anastomosed. The indications for this procedure have not been determined, but most patients thus far have had occlusion of the carotid artery or an aneurysm requiring ligation of the carotid artery. Although these bypasses function well and perfuse the brain, only time

will tell whether this procedure will prevent further neurological deficit.⁸ Although we are enthusiastic about the future of bypass procedures, at the present time they are experimental.

During this period of improving neurosurgical techniques, the diagnosis of intracranial pathology has not suffered. Housfield and Ambrose reported on computerized axial tomography in 1973.^{1, 10} This is the greatest advance in the application of x-ray since its discovery by Röntgen in 1896.¹⁶ We have had experience with computerized tomography (EMI) scans since March of 1975. This is a noninvasive, painless procedure that can be done on an outpatient basis in cooperative individuals. EMI scans provide the best test for localizing primary intracranial tumors, metastatic tumors, congealed blood clots, infarcts, cerebral cysts, and cortical atrophy. Not only can the EMI scan diagnose the tumor and suggest its pathology, it can also determine its size and location. At last the common but imprecise label of cerebral vascular accident can be confirmed and the various causes differentiated.

The introduction of the operating microscope for use in microneurosurgical techniques during the mid-1960's brought about the first dramatic change in intracranial surgery in more than 30 years. Occlusive cerebral vascular disease, although widespread offers many possibilities for operative intervention; it continues to be the leading cause of disability in the United States.

In the beginning, neurosurgeons worked alone; now the multidisciplinary approach incorporates the services of many specialists (ie, neurologists, neuroradiologists, neurophysiologists, chemotherapists) in a team effort to correct these intricate problems. □

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Computer Assistance for Hospital Acquired Infections Studies and Reports

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A use of the computer is described for the retrieval of periodic intra-hospital summaries of current nosocomial conditions. The procedure which is easily obtained, readable and inexpensive, would assist clinical personnel in locating problem areas, as well as, facilitating epidemiologic investigations.

The primary repository for hospital-acquired infection data is the Center for Disease Control and their publications such as the quarterly reports for the National Nosocomial Infections Study have been very useful. However, when an individual investigator attempts to obtain similar information within a single hospital or among several selected hospitals, he is often forced to search through files and laboratory record books, by hand. A willingness to undertake this tedious task is not enough since the needed data may not have been preserved. Even at institutions with large and expensive computer services for accounting and research use, hospital-acquired infections or nosocomial data are not often kept in a form such that these facilities can be used to retrieve desired information. Institutions without sophisticated

computerization seldom have any machine assistance in record-keeping or report preparation.

The need for periodic intra-hospital summaries of current nosocomial conditions which are easily obtained, inexpensive, and in readable form seems obvious. Not only would these reports facilitate epidemiologic investigations, but also would assist clinical personnel in locating existing trouble areas and in spotting emerging problems. Can machines provide these kinds of summaries? It is the opinion of the authors, that after a one-year experience of implementing and using a machine assisted retrieval system, the answer is emphatically "Yes!" Certainly the computer is not a panacea for all the problems associated with nosocomial data. Questions such as "When is an infection classified as hospital-acquired?" or "What is the appropriate population at risk for computing rates?" are not answered by computers.

Precise definition of terms and clear guidelines for filing or classifying information that is somewhat judgmental is a prerequisite for a valid system whether or not computers are used. What a computerized system can do is retrieve whatever information is kept, compute statistics based on that information, and display results in readable tabular or graphical form in a short amount of time. This can be accomplished with minimum effort on the part of hospital personnel, and at a very reasonable cost.

If one is willing to oversimplify the problem somewhat, the barriers to using machines in this area lie mainly in the inability to have answers to three important questions:

- (1) How can machines help?
- (2) What kind of machines and programs are needed?
- (3) How much will it cost?

Clearly, these questions are not independent, but they are asked primarily by three different groups. The first is asked by the hospital nurse-epidemiologist, infectious disease committees, and research personnel who are not themselves trained in computer techniques and have difficulty in expressing their problems in a manner which is amenable to computer solutions. The second question is asked by personnel having expertise in machine usage, but who do not know the subject matter needs of people concerned with nosocomial data. The third, of course, is asked by administrative or budget personnel who must make decisions for allocation of money and effort for the institution.

The nature of these questions is such that to answer any one, at least approximate answers to the other two are required. Often, as a result of this circumlocution of responsibility, nothing is done. It is hoped that, by presenting

the system initiated at two Oklahoma metropolitan hospitals, interested persons in any of the above three groups may have the approximate answers so as to break the circular chain. It is not the purpose of this paper to present findings in the nosocomial area. Preliminary results of the survey are reported elsewhere.¹

The tables and graphs presented are intended to show examples of what can be obtained directly from a machine. All are reproductions of typed output by a Wang 720 C as part of the routine monthly and four-month summary reports.

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Donald E. Parker, PhD, was graduated from the University of Oklahoma in 1970, where he is presently Associate Professor of the Department of Biostatistics and Epidemiology. Doctor Parker is a member of the American Statistical Association, the American Public Health Association and the Sigma Xi.

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Figure 1. Example of Coding Prepared by the Nurse Epidemiologist.

CASES ARE PATIENTS # MO. 1

	Ward	# OBS	Dischg	100# Dischg	Admiss	100# Admiss	P-Days	100# P-Days
Surgical Service	1C	6	81	7.41	100	6.00	724	.83
	2C	2	97	2.06	119	1.68	694	.29
	ICU	7	64	10.94	63	11.11	204	3.43
	Total	15	242	6.20	282	5.32	1622	.92
Gynecology	2B	1	60	1.67	69	1.45	308	.32
	Total	1	60	1.67	69	1.45	308	.32
Medical Service	3A	1	71	1.41	90	1.11	637	.16
	3B		63	.00	74	.00	591	.00
	3C	3	89	3.37	94	3.19	575	.52
	CCU		27	.00	25	.00	71	.00
	RCU	1	24	4.17	25	4.00	73	1.37
	Total	5	274	1.82	308	1.62	1947	.26
Obstetrical Service	4A	5	176	2.84	170	2.94	771	.65
	Total	5	176	2.84	170	2.94	771	.65
NB-Pediatrics Service	NB & NS	1	190	.53	184	.54	1023	.10
	Total	1	190	.53	184	.54	1023	.10
Childrens Nsry 3	flr	1	39	2.56	37	2.70	385	.26
	3J	3	74	4.05	82	3.66	367	.82
	2J	3	77	3.90	72	4.17	742	.40
	1J	3	71	4.23	71	4.23	334	.90
2G	Sth	2	41	4.88	40	5.00	343	.58
	2G		41	.00	60	.00	349	.00
	2H	1	17	5.88	16	6.25	119	.84
	Total	13	360	3.61	378	3.44	2639	.49
Hospital	Total	40	1201	3.33	1135	3.52	8310	.48

Figure 2 — Example of Tabular Summary for Rates Typed Directly by the Machine System.

HOW CAN MACHINES HELP?

The nurse-epidemiologist coded a labeled data form for each infection observed. This was then transformed to standard 80 column IBM punch cards. Figure 1 shows the form with three infections coded. The first two are for the same patient who acquired two infections. A 1, 2, etc, in the column labeled "CARD #" designated the initial, second, etc, infection for a given patient. Although six organisms could be coded as isolates from the site, to date, no more than five have been reported.

Since the nurse had no previous experience with coding for machines it was anticipated that she would have difficulty in orienting to the form. However, after only one hour of discussion and training, she was able to perform the coding. The task was well accepted since the resulting reports relieved her of preparing summaries and resulted in an overall saving of time.

At the end of each month the cards were processed and a twelve-page report was typed by the machine directly onto bond paper. These were then reproduced by a Xerox copier and distributed. After four months a similar, but slightly more extensive summary report was

produced. The report consisted of three types of tables.

1. *RATES*: A tabular summary for rates for each ward was presented. Figure 2 is an example of one month's rates. Note that rates were compared using discharges from (and transfers out of) each ward as the denominator for populations at risk and also a rate using admissions (and transfers into) each ward as the denominator. Also, a rate based upon patient-days in each ward was calculated.

2. *ONE WAY FREQUENCY DISTRIBUTIONS AND BAR GRAPHS*: Figure 3 is an example of this type of data display. A similar display was typed for Wards, Microorganisms, Sites, and Predisposing Factors.

3. *TWO WAY FREQUENCY DISTRIBUTIONS*: In addition to the sample table depicting type of microorganism, by ward (Figure 4), tables showing sex by age, microorganisms by site, ward by predisposing factor, and site by predisposing factor tables were presented in each report. For selected tables, the ratio of cell totals to column and/or row totals were obtained.

WHAT KIND OF MACHINES AND PROGRAMS ARE NEEDED?

All processing was done on a Wang 720 C programmable table top calculator, which has only 247 registers for storing both program and data. The Wang was interphased with a Univac Model 0708 Punched Card Reader by a Model 770 Card Reader System from I/O Systems. The basic machine is one of the smallest that might be dignified with a title of "computer." It is the same machine used by many businesses such as automobile dealers for consumer contact preparations, accounting and billing. The main point is that a large, sophisticated and expensive computer is not required, in order to have a useful nosocomial record system. Certainly larger machines could process faster and service a system that would retain more information, but the lack of access to computers costing \$20,000 or more should not prohibit an institution from considering a system.

Only three computer programs were needed for this study, one for each of the three types of output, previously described. The program for calculating rates was written specifically for the study; however, the other two were existing programs already developed by the senior

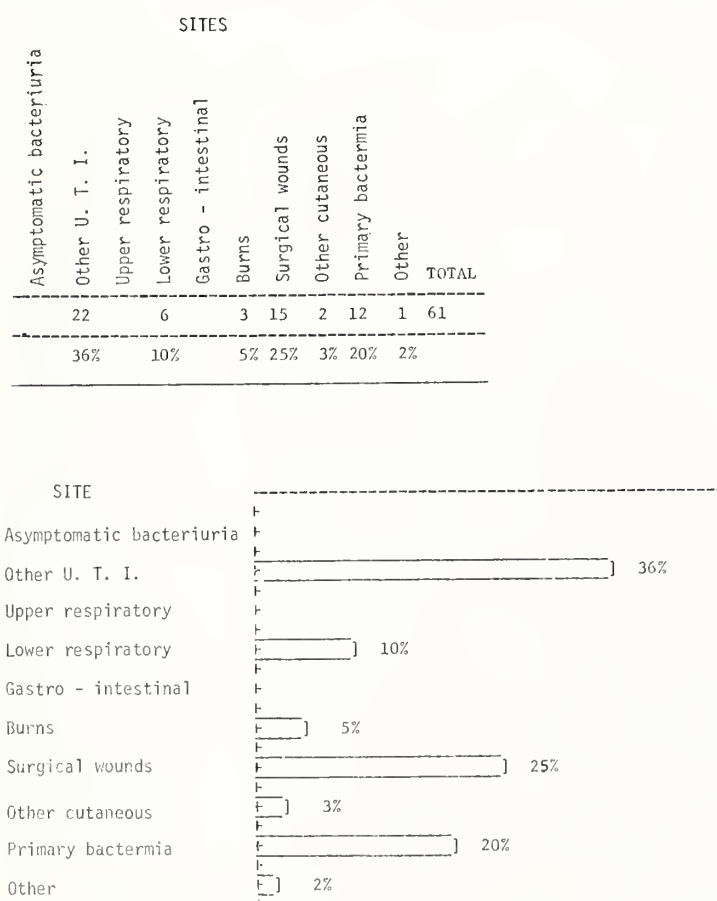


Figure 3 — Example of One Way Frequency Tabulation by Sites.

	1 C	2 C	ICU	2 B	8 A	8 B	3 C	CCU	RCU	4 A	NB & NS	NSRY 3 flr	8 U	2 J	1 P	2 G Sth	2 G	2 H		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	TOTAL	MICROORGANISMS
1													1	1	1				3	Candida albicans
2													1						1	Candida sp.
3																				Citrobacter
4			1												1				2	Diplococcus pneumoniae
5			1										1	1	1				4	Enterobacter sp.
6	2		3				1			4	1		1	1					13	Escherichia coli
7																				Fungi (non-yeast) other
8			1																1	Hemophilus influenz.
9																				Herellea — MIMA Group
10	4	1	1				1						1	1				1	10	Klebsiella sp.
11	1	1	1													1			4	Proteus mirabilis
12																				Proteus vulgaris
13			2																2	Proteus sp.
14			2										1	2					5	Pseudomonas sp.
15																				Salmonella sp.
16							1												1	Serratia marcescens
17																				Shigella sp.
18	1	1	1		1								1						5	Staph. aureus
19																				Staph. Epidermidis
20			1										1						2	Strep. alpha hemo not
21				1						1	1			2					5	Other
	8	3	14	1	1		3			5	2		8	8	3	1		1	58	

Figure 4—Example of Two Way Frequency Tabulation of Microorganisms by Ward.

author for another purpose. In order that the output format would conform to the labeled forms used by the nurse-epidemiologist, minor modifications were required.

HOW MUCH WILL IT COST?

Although the project described had a total budget of \$200 to pay for the cost of data forms, copying, and key punching, exact cost accounting of other expenses such as programming are more difficult to ascertain. However, based on estimates from commercial firms, the cost of initial program writing would be approximately \$300. No exact charge for machine time is available since departmental personnel are permitted to use the computer at no charge. Estimates obtained from other facilities would place such costs at under \$40 per report. It would also be advantageous to have the services of a statistical clerk for one or two days a month to process the data for distribution. If such a person is not available, a student or secretary would be adequate to fulfill this need.

Undoubtedly, a table-type computer system, as described, is feasible for the retrieval of many kinds of hospital data. At a relatively low cost, a nosocomial infection monitoring system has been set up and is continuing in

two metropolitan hospitals. Trouble areas in a hospital can be located very easily and control measures instituted. Information can be obtained on types of microbial agents and sites isolated, age and sex of patients, and predisposing factors such as instrumentation and antibiotic therapy. Retrieved data can be read rapidly by almost any hospital personnel. Rates and graphs can be made for each ward so that personnel can see how their wards compare to others. Besides monitoring hospital infections, alone, the machine can facilitate the generation of specific hypotheses. One can compare, for example, an infected group with an uninfected group relative to some factor thought to be causally related. The cost of such computers will depend entirely on the amount and the sophistication of the data required for individual hospitals. For a great many hospitals, computer systems can be made available at reasonable costs. The amount expended would be trivial compared to the benefits received.

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The Expectation-Delivery Gap

LAWRENCE L. WEED, MD

Today, I would like to talk about graduation as the day your life suddenly changes from years of defined goals and known expectations to a life of vague and ill-defined expectations and maddeningly elusive goals. Let me explain. Up until now, there has always been a course to take, an examination to pass, a degree to get, a tuition bill to pay — not always pleasant but always on a defined time-table which has been appreciated and understood by long-suffering families — and success, when achieved, has been assured of recognition. Today's graduation is an example of such recognition. But after today, your goals must become peculiarly your own, and you must discern the expectations of you held by your patients, your families, your friends, your superiors, and then you must try to match those expectations to those you have of yourself. For to the extent that there is a gap between what patients expect and what is delivered—and what families expect and what is delivered — then to that extent there is the potential for unhappiness and even bitterness.

In any human endeavor, there should be:

I. A system with rules for meeting a defined set of goals and expectations.

II. Audit of performance within those rules with corrective feedback loops.

III. Audit of the system and the rules themselves with outcomes, so that changes can be

made in the rules or the expectations, if in the face of the best possible human performance, goals are not reached and expectations are not fulfilled.

We should not be easy on ourselves and change rules lightly in the face of a few obstacles, but neither should we be stubborn and persist in trying to reach unrealistic, indeed impossible, goals and expectations. And most of all, we should not ignore or be vague about expectations and act as if we do not need any rules at all. It is this latter trap that the practice of medicine has fallen into, and has led to a sort of hallucinatory fulfillment on the part of the physicians and considerable unhappiness and anxiety among the patients — and unknown and unmeasured social and economic consequences.

If medicine had a better-defined system and set of rules, we could be routinely saying to you at graduation — not “now you are a physician” but rather “now you are a full-fledged member of a team” and for a team to function effectively, there must be clear-cut goals and a set of rules. And the goal must be to take care of a whole person, not just a single organ on a specialty ward; and the rules must guide us, as a team, for accomplishing that goal with the right communication tools and medical and surgical techniques. In this endeavor, a few things seem certain. No one can do it all alone, and the hard-won expertise and continued technical ingenuity and proficiency of highly-skilled specialists should not be sacrificed in a

misguided effort to spread any single medical provider too thin in an attempt to achieve full coverage of all the needs of the total patient. And yet, the extremely powerful drugs and manipulative techniques of specialists should not be dispensed without full knowledge of all the interacting forces in a complex and unique individual. It is not so simple as "open season" on gallbladders or back pain or mitral valves — as if the rest of the body would stand still while we killed off diseases one by one — season by season.

How do specialists, trained in a single area, work among the complex, interacting areas of medicine? How do we meet what at first seems like conflicting goals? We do it by developing and emphasizing the rules of communication among providers as we launch into our effort as a team to provide meaningful total care. It does not help the patients to swing wildly from the pre-Flexner era of family practitioners who were condemned by Flexner because of their lack of deep understanding as he closed many of their schools for superficiality — swing from them to an era of specialists and "basic scientists" who feel that their very goals in scientific medicine are threatened by demands on them to care for whole people — and then swing back again to an era of mushrooming family practice programs and primary care centers — always chasing the illusion that somehow with some program we can make the complete doctor. No, we can only define a program of complete medical care in which the linkages and means of communication are paramount and in which each member of the team operates with maximum respect for the rules and the limitations of his own contribution. Without this, we have these dangerous gaps between what is expected and what is delivered among everyone involved — patients, physicians, nurses, providers of all types, families, and finally legislators who are asked more and more to foot the bill. And without these rules we cannot sort the good from the bad of what we do, and then writers like Ivan Illich emphasize the bad, and some even suggest the whole medical enterprise is now doing harm at a greater rate than it is doing good.

That harm is in four different areas — the areas of coordination, logic, memory, and feedback. I would like to take a few minutes and discuss each of these areas in the framework of what people expect and what we have been delivering.

COORDINATION: Patients expect that when they go from physician's office to hospital to x-ray department to family planning clinic and so forth, and receive care from nurses, doctors, physiotherapists, orderlies, and a host of others, that somehow all will act in a coordinated manner and that the efforts of one will not conflict with the efforts of the others. When patients are admitted to the hospital for a broken hip or for diabetic acidosis, they expect that their problems will be recognized and dealt with. In other words, they expect that in our profession the right hand knows what the left hand is doing. They may not have thought how such coordination is to be achieved — whether by perfect memories and continuous telephone consultations or by superb, up-to-date records — but, nevertheless, they expect it. We all know that for many patients, that expectation has not been met. It could be met if all the patients were given a copy of their record or if the record were in electronic form so any medical provider could see its contents at the speed of light from a computer terminal in his or her office.

LOGIC: And if patients had that record they would expect that it relates not only what has been done and what has been planned, but why it was done and for what it was planned. They would want, in other words, a problem-oriented record so that the evolution of each problem is known at a glance to each provider and to the patients themselves. We all know that this expectation has not been fulfilled for many patients, but it could be if complete, up-to-date problem-oriented records were the rule in all medical institutions, and if all used them as a team to achieve well-defined goals for the patient's total care. Some head nurses and doctors will indignantly tell you that you do not need to work from the record systematically each day as you see your patients, for after all they may have made rounds together for years and they "know their patients." But as they are leaving the hospital, you should ask them if they have a bus out there to take the patients

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home with them — after all, they are “their patients” and they understand them. Certainly, they would not leave an understaffed floor all night with new physicians and nurse floats that are completely new to the ward without any organized records to guide them in the care of those patients. Certainly, disease does not turn itself on and off according to the schedule of the medical personnel who “know” the patients.

MEMORY: The patients expect that we keep up-to-date both on the medical literature appropriate to their problem, and up-to-date on their own personal data. They have a right to expect that we have a system to accomplish this. They may not have thought about how we achieve it, but if asked it is unlikely that they would conclude that you should try to “stuff” the world’s medical literature into the heads of providers along with all the facts of the patients themselves, and then allow integration and organization to become accomplished by unstructured and varying bits of oral communication on rounds and in conferences. In a society full of people who have to deal with written details and great discipline in areas such as music, athletics, banking, architecture, merchandising, and so forth, it is unlikely that in the name of art they will accept hit-or-miss communication techniques in the field of medicine. As Norbert Wiener said, “If you want to understand a society, understand the messages and communication tools of that society.” When an enlightened public does begin to think more carefully about how we do our job, they will be very quick to perceive the gap between what they have been expecting and what we have been delivering. Gaps always lead to frustration and disillusionment. Those of you graduating now may have to pay for the sins of a whole previous generation of providers. To the extent that systems problems have led to malpractice suits today — there is no doubt that a few physicians are paying heavily for the bad system that we all allowed to develop and flourish.

FEEDBACK: Patients expect that we will grow wiser as a profession as we gain experience. It is no sin to not understand everything and to make honest mistakes in the face of complex and poorly understood situations — but it is a sin to do things in a manner in which one cannot grow wiser from what he does. And

because we have not dealt vigorously with our problems of coordination, logic, and memory we are guilty of doing just that. Medicine has a remarkable history of outstanding achievements — particularly in terms of specific new drugs and procedures and surgical techniques, and we are all extremely grateful for them — but that history has not been matched by an equally well thought out means of seeing that the fruits of our labor are always used in a highly-organized and disciplined manner for the benefit of whole, individual human lives, as opposed to just genius with a single organ or body system as pursued by single-minded specialists.

Then I, at least, think of you graduating today not so much as “the physician” but rather as a member of a team. When we think of ourselves as members of a team we are much more likely to be conscious of the overall goal and the details of our interactions with other members of the team in achieving that goal. The interactions, the linkages, a sort of magical blending of parts like in a great symphony orchestra can become the principal focus — it should be assumed that each of us will handle the sophisticated details of his own part without falling victim to the illusion that a single part is the whole or that the other parts do not matter. Terms like “primary care,” “emergency room care,” specialty care such as “hematology” or “endocrinology” or “orthopaedics” when focused on exclusively can do us a great disservice. They lead us to elaborate upon a particular area for its own sake, becoming oblivious to the linkages and the feedback loops that are necessary to make the whole medical enterprise worthwhile. There are times now in the practice of medicine when physicians and other medical personnel are like a group of musicians in a room, each playing his instrument with his own particular composition — and all without a conductor. Although the amount of talent in the room is extensive and the potential for great music is staggering, all we hear is noise. The answer is not to put them all in separate rooms to practice — there the potential for performing the symphony would be lost. Nor should we dismiss or silence all the musicians — for it would take generations to redevelop them. The answer is to create a framework in which all can perform together — creating satisfaction for both the performers and those who listen.

Also, when we focus exclusively on the sepa-

rate parts they assume a rigidity of content, an application that is incompatible with the needs of a total situation in which demands and individuals vary enormously. We need talented people who have specialized starting points but who have great flexibility and the attitude of a problem-solver — expanding and contracting their role — calling in others when appropriate — but always with a total picture in mind of what the overall endeavor is all about.

The practice of medicine at one time in the past may have been analogous to the single, virtuoso performer who was free to improvise and be the sole medical servant of his patients. But that perception of the role of a physician would be totally inappropriate to modern times. The solution is much more analogous to members of a large symphony orchestra whose excellence is related not only to talent of the individual members but also to the leadership and discipline that are vigorously exercised in behalf of an overall artistic achievement.

I expect that you will look critically at the medical system of which you are a part and the rules within that system, and do what you can to change the rules when necessary or to even develop some where none exist. You must help to create a "context for discrimination" as opposed to a "context for gambling." Modern medicine can do harm as well as good with its powerful drugs and surgical techniques and we can expect to be held accountable. We must develop means for sorting the good from the bad.

And finally, when others in the interest of

good patient-care and rigorous scientific discipline have occasion to criticize your efforts (and with the infinite number of variables in medicine, there will always be room for improvement) I trust you will resist the temptation to defend yourself by reciting all your achievements or by mobilizing testimonials from all of the patients that have come to depend upon you, or by citing the tremendous constraints of time and energy on your performance in taking care of your patients. We have been merely doing our job for which we have been inordinately well-paid by society. Good work never justifies bad — particularly when the bad could have been avoided through planning and discipline — teamwork and leadership. Airlines are not quickly forgiven when one plane crashes just because most planes land safely — nor are politicians and leaders forgiven because percentage-wise they tell the truth most of the time. We deplore paternalism and self-righteousness in others and we should be careful not to display it in ourselves when confronted with rigorous comparisons of what people expect and what we actually deliver. The practice of medicine is, after all, not a routine private business, but a public trust; and graduation is as good a time as any to remind ourselves of our ultimate responsibility and of the principles and tools that are fundamental to meeting this responsibility. □

Department of Medicine, College of Medicine, The University of Vermont, Given Building, Burlington, Vermont 05401.



News From The Oklahoma State Department of Health

IDEAL INFLUENZA VACCINE SCHEDULE¹

AGE	HEALTHY	CHRONIC DISEASE (HIGH RISK)
6 mos to 3 yr	None	.25 cc bivalent split product × 2 doses at 4 week interval
3 yr to 17 yr	.5 cc monovalent split product × 2 doses at 4 week interval ²	.5 cc bivalent split product × 2 doses at 4 week interval
18 yr to 24 yr	.5 cc monovalent whole vaccine × 2 doses at 4 week interval	.5 cc bivalent whole <i>or</i> split product × 2 doses at 4 week interval
25 yr to 45 yr	.5 cc monovalent whole vaccine × 1 dose	.5 cc bivalent whole <i>or</i> split product × 1 dose
45 yr and over	.5 cc monovalent whole vaccine × 1 dose ³	.5 cc bivalent whole <i>or</i> split product × 1 dose

All vaccines made by Parke-Davis and Wyeth are split-product vaccines (the vials of vaccine may not be labeled "split product.")

The terms split product and sub virion are synonymous.

All vaccines made by Merrell-National and Merck Sharp and Dohme are whole virus vaccines.

Important Notes

1. The above schedule is the ideal program model and obviously cannot be used in large community clinics. We recommend using only monovalent whole virus vaccine in mass community clinics.
2. The vaccine for the healthy 3 to 17 year age group is in short supply and will be distributed when sufficient quantities are received to effect a viable program. The immunization of those 3-17 years is Phase III of the statewide plan and will begin sometime in December.
3. Healthy individuals over age 45 may receive bivalent vaccine either whole or split product. The decision to offer *bivalent* at mass community clinics is left to the discretion of the county coordinator. ☐

COMMUNICABLE DISEASE IN OKLAHOMA FOR NOVEMBER, 1976

DISEASE	November 1976	November 1975	October 1976	Total To Date	
				1976	1975
Amebiasis	1	1	1	13	31
Brucellosis	—	—	—	7	3
Chickenpox	50	159	38	1666	1194
Encephalitis, Infectious	4	3	2	21	57
Gonorrhea (Use Form ODH-228)	1088	982	1126	12256	12050
Hepatitis, A, B, Unspecified	97	87	93	1213	766
Leptospirosis	—	—	—	1	—
Malaria	—	—	1	3	2
Meningococcal Infections	1	3	—	22	13
Meningitis, Aseptic	3	2	12	33	78
Mumps	69	82	47	802	295
Rabies in Animals	20	4	24	165	101
Rheumatic Fever	—	2	2	13	10
Rocky Mountain Spotted Fever	2	—	5	96	88
Rubella	5	6	3	75	94
Rubella, Congenital Syndrome	—	1	—	—	2
Rubeola	6	4	5	301	148
Salmonellosis	29	23	22	248	249
Shigellosis	1	15	5	169	296
Syphilis, Infectious (Use Form ODH-228)	7	6	5	96	86
Tetanus	—	—	—	—	—
Tuberculosis, New Active	28	28	55	353	285
Tularemia	1	—	—	8	9
Typhoid Fever	—	—	—	1	1
Whooping Cough	3	1	1	23	25

For Consultation Call: (405) 271-4060

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I N V E S T M E N T O F A F E W M I N U T E S


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ACUTE
CYSTITIS*

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Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

FOR THE PAIN

- Quickly relieves painful symptoms such as burning and pain associated with urgency and frequency.
- *Recommended antibacterial therapy: up to 3 days with Azo Gantanol, then 11 days with Gantanol (sulfamethoxazole).

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function; severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura,

FOR THE PATHOGENS

- Effectively controls susceptible pathogens such as *E. coli*, *Klebsiella-Aerobacter*, *Staph. aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

*nonobstructed; due to susceptible organisms

hypoprothrombinemia and methemoglobinemia); allergic reactions (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); G.I. reactions (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); CNS reactions (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); miscellaneous reactions (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. Usual adult dosage: 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

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Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

*** WARNING**

This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

*** Indications:** When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with

cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K⁺ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy. Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium[®] (triamterene, SK&F Co.), and

leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhotics to check for nondrug-related variations in blood pictures, and in patients with folic acid depletion, since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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AMA Endorses NHI Bill

Following more than six hours of heated debate in reference committee and on the floor of the House of Delegates, the American Medical Association has voted to reintroduce its version of a national health insurance proposal. The action came at the AMA's clinical convention in Philadelphia, December 4th-8th.

As in the past, the most divided and heated debate of the AMA meeting revolved around national health insurance and HR 6222, the AMA's Comprehensive Health Care Insurance Act of 1975. Once again debate over the issue was divided regionally, with the more liberal delegates from the East backing the measure and the more conservative delegates from the Midwest and South opposing it. The delegations from Louisiana and Nebraska submitted resolutions calling for the AMA to withdraw its support from HR 6222, while the New England caucus called for it to be submitted again in the 95th Congress.

Although it took more than six hours to bring the national health question to a vote, the final vote on the measure was not really close. With most of the AMA leadership favoring the bill, the AMA-backed NHI proposal eventually weathered the storm, passing 181-57.

The most vocal of the opposition was the Louisiana delegation whose resolution warned of the breakdown of the health care system in England and predicted a similar fate for the United States should national health insurance be implemented. Louisiana called for the AMA to abandon its position favoring NHI and to do a 180 degree turnabout. The resolution called for the AMA to conduct an all out campaign to defeat NHI and to spend about one-half of the AMA's reserve in this effort — about \$6 million.

In countering the anti-HR 6222 thrust, the New England caucus and the AMA leadership

argued that American medicine could not take a strict position opposing all types of national health insurance. They warned that to do so would leave the AMA and American medicine out-in-the-cold when the Carter Administration begins considering the advisability and practicality of national health insurance.

Withdrawing the AMA's support of HR 6222 would "completely decimate the AMA's credibility on all legislative matters," said the chairman of the AMA Council on Legislation.

From there the debate continued with pro and con forces reemphasizing many of the same points. The pro forces continued to argue that in order to have a forum at the congressional national health insurance debates, the AMA must have a proposal of its own. Otherwise, warned one doctor, the AMA will be left talking to itself. Other members of the pro forces warned that the AMA cannot continue to be opposed to everything. This bill, they said, embodies the principles approved by the AMA House of Delegates.

Countering those arguments, the forces opposing reintroduction of the AMA measure argued that being against NHI is not negativism, just as "Being against worms is not negative; it's being for apples." A delegate from Florida argued, "I know of no other national industry that has a bill to nationalize itself except medicine. The AMA is the last positive political force for medicine. If we sacrifice our independence for an intellectually dishonest bill, then what can we expect from Congress?"

The president of the Louisiana State Medical

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Society also presented the results of a poll it conducted through *THE SURGICAL TEAM*, a publication with a circulation of 55,000. That poll, stated the president, showed that 60 per cent of the 2,000 replies opposed NHI and 93 per cent felt NHI would not improve the quality of medical services.

When the debate on the issue was terminated and the vote was taken, however, the House of Delegates voted overwhelmingly to reintroduce HR 6222 during the next session of Congress. □

OSMA To Co-sponsor "Find Your Doctor Day"

The Oklahoma State Medical Association and the University of Oklahoma Health Sciences Center will cosponsor the first annual "Find Your Doctor Day" February 3rd from 8:30 a.m. to 3:30 p.m. The program will be held in the Basic Sciences Building on the OUHSC Campus in Oklahoma City.

The day-long event will give OU medical students and residents the opportunity to meet with community leaders and to become familiar with the practice opportunities available in non-metropolitan areas. The program is also

designed to familiarize community leaders with the various physician placement services which are available to them.

The morning's activities will be primarily devoted to a discussion of the steps which are being taken to encourage more physicians to go into primary care practices within the state. The afternoon will be devoted to round-table discussions involving community leaders, medical students and residents. Small exhibit areas will be available to community leaders to aid in these discussions.

Those invited to participate in the program include hospital administrators and physicians from non-metropolitan communities, chambers of commerce and state legislators. Other cosponsors for the event are the Oklahoma County Medical Society, the Oklahoma City Chamber of Commerce, the Oklahoma Chamber of Commerce and the Oklahoma Hospital Association.

Communities wishing to take part must register in advance and indicate whether exhibit space for the afternoon session will be needed. The deadline for booth reservations is January 20th, 1977. For more information, contact The Oklahoma Council for Health Careers, 715 NE 14th, Oklahoma City, Oklahoma 73104, (405) 271-5739. □



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Malpractice Rates Hurting Patients

The cost of physicians' malpractice insurance is hitting the patient where it hurts — in the pocketbook.

Patients paid an estimated \$1.24 for malpractice insurance each time they visited a doctor in 1975. That amount was about 8.1 per cent of the full amount the patient paid for the visit, according to preliminary estimates of the American Medical Association. The impact on the patient this year is even greater, the AMA said, because malpractice insurance rates are still on the upswing.

In 1973, a patient paid an estimated average of 30 cents per doctor visit for malpractice insurance, or about 2.4 per cent of the full price of the visit.

AMA's estimates are based partly on its own survey of physicians and partly on data from Federal agencies. The cost of his malpractice premium is considered to be a business expense of a physician, a component of the fee he charges.

Physicians paid an average of \$610 for malpractice insurance in 1968 and \$1,905 in 1973, the AMA's survey of doctors revealed. Since then, according to a government survey of the insurance industry, the premiums went up another 84 per cent in 1974 and 125 per cent in 1975. The AMA used those percentage increases to estimate the average payment per doctor in 1975 for malpractice insurance, \$7,887.

All told, doctors' business expenses (including their malpractice insurance rates) have been rising substantially faster than increases in doctors' fees. During the eight years 1966-1974, doctors' business costs per patient were rising at an 8.3 per cent per year rate, the AMA study says. At the same time, according to the Consumer Price Index, doctors' fees went up at a 6.2 per cent average annual rate.

Studies indicate that the sharp rises in malpractice insurance rates are also having a "ripple effect" on patient care and costs, the AMA notes. In a survey of its members the Texas Medical Association recently identified the steps physicians are taking to avoid a malpractice suit:

- 67 per cent of the Texas doctors said they were ordering more x-rays;
- 66 per cent were ordering more lab tests;
- 65 per cent were making greater use of a second physician's opinion;
- 51 per cent were setting limits on the pro-

cedures they were willing to perform;

- 50 per cent were delegating less responsibility for the patient's care to others;

- 48 per cent were hospitalizing their patients more.

The TMA study also found that the amount a physician pays for his malpractice insurance and its rate of increase tends to vary according to the "riskiness" of his medical specialty. Malpractice insurance premiums among Texas physicians in 1975 ranged from \$1,023 (for psychiatrists) to \$10,431 (neurosurgeons), while the premium increases over the past five years (1970-1975) ranged from 284 per cent (ophthalmologists) to 627 per cent (neurosurgeons).

Forty-eight per cent of the Texas physicians said increases in their malpractice insurance premiums had forced them to raise their fees in 1975. And 95 per cent anticipated that they would have to raise their fees in the future for the same reason.

"When Federal controls on physician fees were dropped in 1974, we asked physicians to do their best to hold the line," commented AMA Executive Vice-President James H. Sammons, MD. "Physician fees have not risen as rapidly as their costs. But no one can reasonably expect doctors to absorb the sometimes horrendous impact of increased malpractice insurance premiums." □

Hair Transplant Symposium Planned

Co-sponsored by the American Society for Dermatologic Surgery and the American Academy of Facial Plastic and Reconstructive Surgery, the Fourth Annual Hair Transplant Symposium and Workshop will be held February 11th and 12th, 1977. Site of the meeting will be the Stough Dermatology and Cutaneous Surgery Clinic, P.A., Doctors Park, Hot Springs, Arkansas, 71901.

This conference has been designed to offer an opportunity for the exchange of ideas among various disciplines and to present the latest advances in techniques on hair transplantation. A multi-discipline, international faculty will include dermatologists, otolaryngologists, regional and general plastic surgeons.

Attendance will be limited and further information may be obtained from D. B. Stough, III, MD, Program Director. □

Patient Inserts Draw Attention

Patient package inserts for almost all drugs, one of the major demands of the consumer movement, and their attending problems and concerns, were discussed at a two-day symposium in Washington, DC, recently. The session was sponsored by the AMA, the Drug Information Association, the Food and Drug Administration and the Pharmaceutical Manufacturers Association.

The patient insert should not be confused with the package insert. Years ago Congress approved the requirements for the package insert for prescription drugs, apparently in the mistaken belief much of this information would get to the patient. Most of it went to pharmacists; none was required to be given to patients.

There were hearings in the last Congress on legislation introduced in House and Senate aimed at providing patients, with certain exceptions, insert information on the prescription drugs they receive.

FDA Commissioner Alexander Schmidt, MD, told the symposium the consumer has a right to know about the medicine he is taking. "There is increasing evidence that a high proportion of Americans either do not understand the prescription instructions or do not follow them," Doctor Schmidt said. He contended there is a lack of effective communication often between physician and patient on drug information.

The information supplied patients must not be as detailed as the warnings required in advertising, he warned however. This would be "an invitation to hypochondria," said Doctor Schmidt. Rather, he said, the information should be in plain English, factual, and explain why the drug is being taken, major side effects to watch out for, and when to report reactions to the physician.

William Barclay, MD, AMA Group Vice-President for Scientific Publications, said carefully prepared information about selected drugs is desirable and could be of service to patients, physicians and pharmacists. However, Doctor Barclay cautioned that there is a clear danger that the disclosure could be so alarming as to discourage use of drugs that are vitally needed.

One of the major questions to be answered is how the insert would be distributed. "Obvi-

ously, the physician would rather not have the responsibility of stocking in his office perhaps thousands of brochures," he said.

Doctor Barclay said of even greater importance is the liability and other factors involved when physicians for the sake of their patients either want no insert provided or want to suggest doses or other information that might run counter to the insert's material.

Doctor Barclay noted that labelling has had little effect on cigarette smoking. He also noted that one of the most powerful drugs available with all sorts of adverse reactions and addiction potential would not be covered by the patient insert — alcohol.

John Adams, PhD, Vice-President of the PMA, said non-prescription drugs contain far more patient informational material than the stronger prescription drugs. However, the patient package insert could cause severe strain on the physician-patient relationship, he said. "An adequate explanation of the risks and benefits might be impossible in a brief description."

Joseph Onek, Counsel for the Center for Law and Social Policy, suggested that a priority list be made up for the inserts, starting with all drugs used in pregnancy, then tranquilizers and barbiturates. □

Diabetes Seminar Planned for Tulsa

"Diabetes Mellitus — 1977 — Update" is the title of the professional seminar to be held in Tulsa on Friday, February 11th, 1977. The seminar is being financially supported by the Upjohn Company in cooperation with the Diabetes Education Center of Saint Francis Hospital and the Eastern and Western Oklahoma Chapters of the American Diabetes Association.

The conference is designed for physicians who are concerned with the treatment and management of diabetic patients. The faculty consists of Ronald Arky, MD, Chief of Medicine, Mount Auburn Hospital, Cambridge, Massachusetts; Robert L. Jackson, MD, University Hospital, Columbia, Missouri; Peter H. Forsham, MD, University of California Medical Center, San Francisco; and Robert L. Scott, MD, Saint Francis Hospital, Tulsa, Oklahoma.

Reservations can be obtained from Georgette Taylor, Saint Francis Hospital Education

Center, Kelly Professional Building, 6565 South Yale, Tulsa, Oklahoma 74136. Reservations must be received by February 1st, 1977. ☐

CPR Training For Medical Assistants

Basic Life Support (cardiopulmonary resuscitation) and Emergency First Aid in the physician's office are the subjects to be covered in a workshop co-sponsored by the Oklahoma Chapter of the American Association of Medical Assistants and the Oklahoma Center for Continuing Education, University of Oklahoma campus, in the Forum Building on February 18th and 19th, 1977.

The Cleveland County Chapter of the American Red Cross is furnishing instructors and the adult and infant mannikins needed in developing performance skills for the course. Red Cross certification may be earned by passing the written exam and giving satisfactory performance in the practical skills.

Overnight accommodations should be made independently but facilities are available at the University, if desired, or attendees may contact local motels.

Registration will be limited to the first sixty applicants and all participants will need to be registered by February 1st, 1977, so they may receive advance literature. Registrations will not be accepted on workshop dates. Application for the course should be sent to Doctor Floyd Taylor, Special Programs, University of Oklahoma, 1700 Asp Avenue, Norman, Oklahoma 73037. ☐

Need A Physician's Assistant?

If you have heard about a Physician's Assistant (PA) and would like to know more about how they might function in your practice, you may contact the Oklahoma Council for Health Careers & Manpower, Inc. They serve as a clearinghouse for PA's interested in being employed by physicians and for physicians who are seeking to hire PA's.

They have on file 19 applications of PA's currently available or available within the next year. Copies of the law relating to the use of PA's in Oklahoma are available, and for detailed information they can put you in touch

with faculty members of the University of Oklahoma Physician's Associate Program.

The Council is a private, non-profit corporation that has been serving the state of Oklahoma since 1967 in recruiting and placing health manpower. This service is coordinated and works in conjunction with the Oklahoma State Medical Association, the Oklahoma State Board of Medical Examiners, the University of Oklahoma College of Medicine, and the Physician Manpower Training Commission. There is no charge for their services.

To obtain any of the above information, you may contact: Mrs. Gloria L. Bohn, Oklahoma Council for Health Careers, 715 N.E. 14, Oklahoma City, Oklahoma 73104, Telephone (405) 271-5739. ☐

Oklahoma Rheumatism Society To Meet

February 23rd-26th, 1977, are the dates for the Third Annual Program of the Department of Medicine at the University of Oklahoma Health Sciences Center and the Oklahoma Rheumatism Society, which will be held at the College of Medicine in Oklahoma City.

The Visiting Professor of the College of Medicine will be Doctor Lawrence E. Shulman, former Director of the Connective Tissue Division of Johns Hopkins University and at the present time at the National Institute of Health, Bethesda, Maryland, where he directs National Research Programs in Rheumatology and related fields. On Friday, February 25th, 1977, he will deliver the Third Annual William K. Ishmael Lectureship in Rheumatology, "Systemic Lupus Erythematosus."

On February 26th, the Annual Meeting of the Oklahoma Rheumatism Society will be held. The Program Chairman, Doctor Robert C. Troop, is preparing an outstanding program. The faculty will include Doctor Shulman and Doctor Rodney Bluestone, Professor of Medicine at the University of California, Los Angeles. ☐

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Peer Review Committee Lists New Guidelines

Editor's Note: The Peer Review Committee of the Oklahoma State Medical Association has performed an essential service for several years by reconciling "unusual insurance claims involving members of the OSMA, their patients and health insurance companies." The committee has been reorganized and streamlined this year in an effort to make it more effective. Below is a description of the committee and the rules and guidelines under which it operates.

PEER REVIEW FUNCTION

Purpose:

The Peer Review Committee of the Oklahoma State Medical Association and similar committees created by component societies of the State Association, shall serve the function of seeking the objective reconciliation of unusual insurance claims involving members of the OSMA, their patients and health insurance companies.

The Committee shall limit its deliberations to those cases involving health insurance coverage which offers payment of customary and reasonable fees or which question the utilization of physician services. The Committee does *not* establish physician fees.

The doctor-patient relationship, in its basic terms, is a contract for personal services. The physician offers to attempt to diagnose and treat the patient. In return, the patient agrees to pay for the services.

All physicians are urged to discuss their fees with patients in advance of actually rendering service. This is particularly encouraged for the more expensive procedures, while discussion of in-office fees is discretionary. In the event there is no prior agreement as to the fee for the services rendered, the "customary and reasonable" fee is usually determined by what other physicians in the community are charging for the same service. In rare instances, the reasonableness of a fee may be determined by the courts.

In the event that a physician and patient have agreed, in advance of the service being rendered, as to the compensation for that service, the Committee shall limit its deliberations to a determination of what is a reasonable charge for the service for the benefit of the patient's insurance company(ies).

In addition, the Committee shall try to limit

its deliberation to those cases in which the amount in conflict is \$50.00 or more, or situations involving utilization or questions of medical necessity. The Committee may, at the discretion of the Chairman, consider cases involving a lesser amount or cases which establish a precedent.

The Committee may determine that a case brought to its attention is not within its purview. In such a situation the Committee is obligated to forward the case to an appropriate committee of the association, or recommend an avenue of settlement.

Organization:

Annually, the President of the OSMA shall appoint a Peer Review Committee. This Committee shall be composed of a Chairman, Vice-Chairman and at least 25 additional members selected geographically and by specialty. The Chairman of the Oklahoma and Tulsa County Review Committees shall automatically serve as members of the Peer Review Committee.

The Committee shall meet at least every two months, and on call of the Chairman as needed.

The Chairman may appoint a sub-committee to screen all cases submitted for review.

Review Procedures:

The following conditions must be met prior to a case being submitted to the Peer Review Committee:

*All other appropriate avenues of settlement must have been attempted by the carrier or patient directly with the physician prior to requesting peer review, including either correspondence, telephone consultation, or personal visitation.

*The patient (if applicable) and the physician (in every case) should be advised in writing by the carrier that there will be an administrative delay in final settlement of a health insurance claim. The letter to the patient should *not* include a statement that a review of charges or utilization is in process, but the physician should be advised by the carrier that the claim is being submitted for review by the OSMA Peer Review Committee.

*A "Peer Review Summary" form and any other necessary information (including a copy of the operative report) must be furnished to the Peer Review Committee if a case is brought

by a health insurance carrier. In the event a physician or patient brings the case, the "Peer Review Summary" form will be prepared by the OSMA staff.

*The OSMA Peer Review Committee will endeavor to see that all cases received by it are handled expeditiously so that its findings may be rendered to all interested parties within sixty (60) days.

Review Process:

When a case is received by the OSMA, it shall be screened by the Peer Review sub-committee to determine if it (a) involves an association member, (b) is properly documented, (c) meets the guidelines set out regarding the amount in dispute, or (d) is of special interest or significance.

If the sub-committee discovers that the case involves a fee that has been previously adjudicated and that fee was less than the fee in controversy, the Committee may recommend to the physician that he accept the lesser amount as reasonable payment from the insurance carrier. In the event either party disagrees with this latter determination, the case shall be submitted for review by the full committee.

If the fee in controversy is less than a previously adjudicated fee, and the sub-committee recommends the fee be paid as billed, no recourse to the full committee shall be allowed.

In the event the case cannot be handled by the sub-committee as filed, the physician or physicians involved, and the Chairman of the county medical society in which the physician resides, shall be notified that a case is pending for review. The county society shall be invited to furnish a written opinion for consideration by the Peer Review Committee. The physician involved shall be invited to submit his opinion to the Committee in writing or personally, whichever he shall choose. In the event he chooses to appear personally, the OSMA office must be notified at least one week in advance of the Peer Review Committee meeting.

The OSMA does not recognize or recommend the use of any Relative Value Study. However, the Committee may, at its discretion, consult such studies and any other information available for guidance in its deliberations.

The OSMA Peer Review Committee shall have the obligation of finding in favor or against the amount of charges or the quantity and/or medical necessity (utilization) of the services provided. In all claims reviewed, the

Committee has the obligation of recommending a reasonable settlement to all parties involved.

Reciprocal Responsibility:

Any patient, physician, or health insurance carrier utilizing the services of the OSMA Peer Review Committee must agree to be bound by the Committee's decision.

Physicians are reminded that Section 7 of the American Medical Association's Principles of Medical Ethics reads in part, "(The Physicians') fees should be commensurate with the services rendered and the patient's ability to pay . . ." The AMA has stated, "The phrase 'commensurate with the services rendered' recognizes that although there are some services which are considered invaluable, nonetheless their practical value lies within a range — within limits above or below which a fee is unconscionable."

Disciplinary Jurisdiction:

The Peer Review Committee of the OSMA shall not function as a disciplinary body, but does have the obligation to file charges with the Association's Grievance Committee, or the Board of Censors of the county medical society, when warranted by the circumstances of a particular case involving the conduct of an association member.

The OSMA and all of its committees are obligated to abide by the Principles of Medical Ethics as promulgated by the American Medical Association. Every effort shall be made to handle all problems called to the attention of the association as expeditiously as possible within the association. □

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news

AMA Sponsors 2nd National Conference on Disabled Doctor

Successful programs and various treatment techniques used to help the physician-patient will be the major theme of a second National Conference on the Impaired Physician. The meeting will focus on those physicians suffering from emotional, psychological or pathological conditions that may impair the doctors' judgment and skill.

Sponsored by the American Medical Association and the Medical Association of Georgia, this meeting will be held February 4th-6th at the Hyatt Regency Hotel in Atlanta.

Speakers and participants will examine the special problems of the "physician-patient" whose disability is caused by alcoholism, drug dependence or a mental disorder.

According to Richard Palmer, MD, AMA's President, "Organized medicine, by virtue of its professional commitment to the public welfare, must continue to work toward developing effective mechanisms for identifying and treating these physicians."

Two sessions will concentrate on significant casefinding issues and a comparison of several recently developed medical society and hospital programs.

Featured on the program are workshop sessions on AMA's Model Act and other legislative support mechanisms, the physician and his family, as well as the legal, economic and educational aspects of the problem. To date, more than 25 states have enacted legislation dealing with the "disabled doctor."

Also, specific treatment techniques for the drug addicted, alcoholic or mentally ill physician will be discussed during the workshops.

A luncheon session will be devoted to a panel discussion by physicians who are recovering alcoholics.

Highlighting the roster of speakers at this conference are: Richard Palmer, MD, President, American Medical Association; Rogers J. Smith, MD, Conference Chairman, Portland, Oregon; Herbert Raskin, MD, former Chairman of AMA's Committee on Alcoholism and Drug Dependence; Stanley Gitlow, MD, Clinical Professor of Medicine, Mount Sinai School of Medicine, New York; Charles Whitfield, MD, Director, Alcoholism Education Project, Southern Illinois University; and Douglas Talbott, MD, Program Chairman, Disabled Doctors Program, Medical Association of Georgia.

Further information on the conference is

available through AMA's Department of Mental Health, 535 N. Dearborn Street, Chicago, Illinois 60610. □

DEATHS

ROBERT M. BIRD, MD
1915-1976

Robert M. Bird, MD, former Dean of the University of Oklahoma College of Medicine, died December 30th, 1976 in Allentown, Pennsylvania. At the time of his death, Doctor Bird was Director of the Lister Hill Institute for Biomedical Communications in Bethesda, Maryland, a position he accepted following his service as Dean of the OU College of Medicine.

Doctor Bird joined the OU faculty in 1952 after receiving his medical degree at the University of Virginia School of Medicine in 1939. He took postgraduate work in hematology at Cornell University and was a faculty member there before coming to OU. After becoming a Professor of Medicine and Physiology, Doctor Bird served as Vice-Chairman of the Department of Medicine and Associate Dean of the Departments of Medicine and Planning and Development before being named Medical College Dean in 1970.

The author of numerous scientific articles, he was presented an award from the OU Board of Regents for superior teaching in 1969. Among his medical affiliations were the American Physiological Society, the American Society of Hematology, the Central Society for Clinical Research and the Southern Society for Clinical Investigation. He had served as Governor for Oklahoma of the American College of Physicians.

DANIEL F. STOUGH, JR., MD
1902-1976

A former Geary, Oklahoma, physician, Daniel F. Stough, Jr., MD, died December 19th, 1976, in Phoenix, Arizona. Born in Linn, Kansas, Doctor Stough retired in March, 1971, after practicing in Geary for 42 years. He was a 1927 graduate of the University of Oklahoma College of Medicine and joined his father's clinic in Geary in 1929. His survivors include Daniel R. Stough, MD, Oklahoma City and Thomas R. Stough, MD, Okarche. □

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Book Review

TEXTBOOK OF PEDIATRICS 10th Edition, Edited by V. C. Vaughan, III, MD and R. James McKay, MD 1876 pp, illustrated. Philadelphia. W. B. Saunders Company, 1975. Price \$32.75.

Thirty years ago Dr. Waldo E. Nelson took over the editorship of Textbook of Pediatrics. With this edition the editorship passes to Vaughan and McKay. The Textbook of Pediatrics is one of the finest texts in any field of medicine. This edition maintains the same high quality and contains several major revisions. There are some 38 new contributors and a large portion of the text has been rewritten and updated. The book has been enlarged by some 300 pages. Some of the new sections which have been added include: Drug Abuse by Adolescents, Child Abuse, Difficult Decisions in Pediatrics and others. Perhaps the only criticism of this book is that authors are referred to in the text without a cited reference to the literature.

All in all, this new edition of Nelson's Textbook of Pediatrics is excellent and can be recommended without reservation for all concerned with care of children. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

PHYSICIAN NEEDED in Fairfax, Oklahoma, only 65 miles to Tulsa. 19-bed, fully staffed hospital, meets all Medicare requirements. Hospital will furnish office and personal housing. Moving expenses paid. Population 2,500, surrounding population 4,000. Contact Herman Rhoads, 918 642-3291, Fairfax, Oklahoma.

SEEK EMERGENCY ROOM, full-time. 38 years old. Contact Box N, The Journal, Oklahoma State Medical Association, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118.

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A Tribute to Dr Robert M. Bird

*Presented at Medical Grand Rounds
The University of Oklahoma Health Sciences Center
January 5th, 1977*

JAMES F. HAMMARSTEN, MD

On a hot September day in 1953, I first met Bob Bird. I had been invited to visit Oklahoma City by Dr Stewart Wolf and the Dean, M. A. Everett, to be considered for the position as Chief of Medicine at the Veterans Administration Hospital. During a busy day I met with all the full time clinical faculty, Stewart Wolf, Bob Bird, John Colmore, Bill Bayley and Bob Schneider, and with members of the Dean's Committee including Bill Rucks, and the staff of the VA Hospital. I was offered the position, accepted it and rented a house. That evening I had dinner with Stewart and Virginia Wolf and Bob Bird. Thus began a friendship that lasted all these years and which Dee and I cherished and had a chance to renew in October of 1976.

To me, as he did to many others, he served as a colleague at work and at play, a counsellor, a sometimes critic and a teacher.

He was above all else a teacher!

He made learning fun and clinical investigation an exciting experience.

Permit me one story. In the clinic I saw a patient, a Mr. Jones, who had hereditary telangiectasis. The senior student was Roscoe "Ike" Robinson. I asked the patient if other members of the family were similarly affected. When he responded, yes, I asked if we could examine some of them. He invited us to their family reunion. We went to the reunion at Quartz Mountain State Park seeking evidence for a genetic linkage. Included were Ike Robinson, Dick Marshall (a junior student who knew something about genetics) Bob Bird and I. Under Bob's tutelage, we became more interested in the sociological aspects and in the family. We returned in Bob's beat-up car — with the radiator leaking, the car overheated; and Ike, unshaven, had to hitch-hike to make it to his commencement exercises — he is now a Professor of Medicine at Duke

University. The article we wrote was published in the *New England Journal of Medicine*.¹ When told this way it doesn't sound like much—but to Dick Marshall and me it brings fond memories, a few chuckles and the realization that we learned about a disease, about a family and that our lives were enriched by the experience.

Many in this room have similar memories.

His medical interests were varied. I have with me a copy of a paper by Drs Bird and Marshall entitled "Unusual Hematological Manifestations in Disseminated Histoplasmosis."² I'll leave it for our guest speaker. (Note—the Medical Grand Rounds topic was Histoplasmosis).

Bob arrived in Oklahoma in May, 1952, along with Stewart Wolf. Stewart promptly left for the farm and Bob ran the department as evidenced by two letters. I quote:

June 13, 1952

"Dear Stewart:

The Dean's Office wants another letter on Bob Schneider. I can't quite see why it is necessary but apparently it is to be presented to the Board of Regents at the July meeting.

I am enclosing a letter for you to sign if it is correct. Please get it back immediately.

Sincerely,
Bob Bird, MD"

June 13, 1952

"Dear Dr Everett:

I wish to recommend for your consideration Dr Robert A. Schneider for an appointment to the fulltime medical staff. I should like to recommend that Dr Schneider be appointed Assistant Professor of Medicine beginning July 1, 1952.

(Continued on Page 73)

"Every man owes some of his time to the upbuilding of his profession."
Theodore Roosevelt

Sometimes even the most ardent supporters of organized medicine tend to separate their medical practices and their daily lives from their state medical association. We all tend to view our professional associations as being organizations run by and for someone else, especially if we have not had the opportunity to be closely involved; we make the mistake of believing that our association and our practices are separate entities, and if we're not careful it's easy to disassociate ourselves from the medical federation and to overlook the many benefits we receive each and every day. This past week I spent a few minutes thinking about how the medical association affects me, and I would like to share some of my thoughts with you.

Anyone who is actively engaged in the private practice of medicine realizes how complicated it all has become . . . both the practice of medicine and coping with all the regulations and forms. I often wonder if the people who are responsible for all these regulations ever stop to think how they affect the physician, how many minutes they add to every visit, how many new employees they add to our payrolls and how many dollars they ultimately add to the patient's bill. On closer inspection I'm convinced they don't. But our medical association does, and it is the only effective group which can represent us in these matters.

None of us can leave our practices often enough to protest every counterproductive regulation which is handed down, and individually none of us would have the clout or the stamina to stand up to a bureaucracy which is concerned with neither time nor money. That's one reason we have our county, state and national associations, and no matter how bad the red tape may seem to you now, it would be a lot worse if it were not for organized medicine.



Our medical associations have done their best to represent us and to stop the flood of regulations and mountains of paper which steal our time and force us to spend more time as administrators and less time as doctors. They have done this while facing almost insurmountable odds . . . today there are almost as many people at HEW writing regulations as there are doctors being regulated.

Most of us remember the utilization review regulations HEW handed down in November of 1975 as a vivid example of how short-sighted and absurd federal regulations can be. I hope we also recognize this as just one example of organized medicine coming to our rescue. If the OSMA and the AMA had not reacted and in the way they did, those regulations would have become law and as a consequence, 40 or more Oklahoma hospitals would be closed today.

Instead, the OSMA and the AMA strongly resisted the regulations and notified HEW that physicians would not comply. Our state medical association readied a public relations program to take our case to the people, and the AMA took the matter to the courts. Eventually we won, HEW withdrew the regulations and today Oklahoma has a demonstration project which could serve as a prototype for the rest of the country. In this case and many others, organized medicine has proven to be our only ally and our only effective alternative.

I could go on and on citing examples such as insurance, public relations, legislation, etc.; the point is each of us is indebted to our association and each of us owes more than just our dues.

From time to time any one of you may be called upon to help and I would encourage you to do so, whether it is working on OSMA projects and committees or providing information to our staff. Remember, by taking part in association activities, we are working to preserve and improve our profession.

Without interested physicians, the original utilization review regulations would have become law. Without interested physicians, we could not have passed malpractice reform. Without interested physicians, medicine as we know it would be faced with more enemies, fewer friends and eventually would disappear.

Orange W. Wilburn

Candida Guilliermondi And Food Poisoning

WILLIAM H. DOWNHAM, MD
ROBERT J. CHILTON, DO
HUGH LONG, BS
JOHN A. MOHR, MD

Home-processed ground-nut products may be contaminated with yeasts and other fungi which result in self-limited food-poisoning syndromes.

Introduction

Food-borne diseases have gained the attention of public health agencies and have been monitored since 1966. In order to establish an outbreak, the Public Health Service requires: two or more persons experience similar illness usually gastrointestinal, after ingesting a common food; and epidemiologic analysis implicating the food as the source of the illness.^{1, 2}

Examination of the stool for fecal leukocytes utilizing the methylene blue wet mount preparation has been demonstrated to be a rapid and reliable way to determine bacterial from non-bacterial diarrhea². The following patients rep-

resent a recent, unusual outbreak of food-borne disease.

Patient 1

A 24-year-old white female developed sudden onset of cramping abdominal pain, nausea, vomiting and watery diarrhea about two hours after eating homemade peanut butter which she had purchased at the state fair. The patient was afebrile and physical findings were unremarkable. Her symptoms subsided within twelve hours on no therapy and there were no sequelae. Stool examination was not done.

Patient 2

A 57-year-old white male presented with nausea, vomiting, cramping, abdominal pain and diarrhea. The diarrhea was described as watery in nature with few formed elements. Three hours earlier he had eaten peanut butter which he had purchased at the state fair. His signs and symptoms resolved within twelve hours after the onset. The physical findings were not remarkable but the methylene-blue wet preparation mounts of stool revealed many polymorphonuclear leukocytes. No stool cultures were done.

Patient 3

A 26-year-old white male presented with history of abdominal cramping proceeding to nausea, vomiting and diarrhea. The diarrhea was described as watery in nature. The patient also related weakness and diaphoresis, but no fever. Approximately three hours before the onset of symptoms, the patient ingested 1/4 cup of homemade peanut butter purchased at the state fair. The patient was seen by his physician who suspected staphylococcal food poisoning and began treatment with oral vancomycin and paregoric with codeine. Methylene blue wet preparation mounts of stool revealed many polymorphonuclear leukocytes, but cultures failed to reveal salmonella, shigella or enteropathic *E. coli*. The stool specimens were not cultured for fungi. The peanut butter was cultured on multiple media. After several days abundant small yellow-white colonies were noted on Sabourauds dextrose agar. The organism was identified as *Candida guilliermondi*. There were no other organisms isolated from the peanut butter. Peanut butter which patients No. 1 and 2 purchased at the same state fair also yielded *Candida guilliermondi* on culture.

The organism was identified by the Center for Disease Control at Atlanta, Georgia.

Wm. H. Downham, MD, is a graduate of the University of Oklahoma College of Medicine. He is certified by the American Board of Internal Medicine and a member of the American College of Physicians and the American Society for Microbiology. He is, presently, a fellow in Infectious Diseases at the University of Oklahoma Health Sciences Center, Oklahoma City.

Robert J. Chilton, DO, a resident in internal medicine, is presently Chief of Medicine, Major, United States Air Force, Patrick Air Force Base Hospital, Florida.

Hugh Long, BA, is a laboratory technician at the Veterans Administration Hospital in Oklahoma City.

John A. Mohr, MD, is Associate Professor of Medicine at the Veterans Administration Hospital and University of Oklahoma Health Sciences Center in Oklahoma City.

Outbreaks of food-borne disease occur hundreds of times each year. Less than half the agents responsible for these outbreaks are identified in the laboratory. When an agent can be identified, bacteria are found as the offending organism in over two-thirds of cases. Chemical poisonings are responsible for a small percentage of transient, non-fatal episodes of gastroenteritis, but many go unidentified¹.

Specific fungi associated with syndromes of food poisoning have been related to contamination of foodstuffs in handling or processing, but may originate in the field. Spores of molds are ubiquitous and foods may be contaminated by many fungi. Proliferation of these fungi is dependent upon proper humidity and temperature. These molds are responsible for damage to grains, seeds, fruits and vegetables, resulting in significant economic loss. Fungal contamination of foods has received more than economic interest in recent years. Toxicity syndromes, mycotoxicoses, have been reported in many forms. Acute syndromes of toxicity are almost invariably related to ingestion of large quantities of spores or toxic metabolites. The acute symptoms are transient and require no specific therapy^{3, 4, 5}.

The more delayed toxic effects are less well-confirmed, but some mycotoxins are incriminated in neoplastic changes in laboratory animals. Aflatoxin, produced by *Aspergillus flavus*, has been linked to primary hepatic carcinoma in animals. The fungus has a particular affinity for ground nuts and has been isolated from high percentages of ground nut products in some parts of the world⁶. Other mycotoxins have been associated with hyperestrogenism in animals and hepatic carcinoma in rats. It has been postulated that the high incidence of hepatic carcinoma in certain areas of the world may parallel the use of rice as a principal foodstuff⁷. These areas tend to be warm and humid, factors important in the growth of fungi⁸.

Our patients had evidence of acute gastroenteritis associated with the ingestion of heavily contaminated peanut butter. The presence of many polymorphonuclear leukocytes in the wet prep mounts of patients 2 and 3 suggests an invasive process, since diarrhea caused by organisms known to penetrate the intestinal mucosa is associated with fecal leukocytes^{9, 10, 11}. The presence of fecal leukocytes is generally used as suggestive evidence of a bacterial pro-

cess or at least disruption of the intestinal epithelium². To our knowledge, this outbreak of gastroenteritis represents the first such associated with *Candida guilliermondi* contaminated peanut butter and may be another cause of acute diarrhea with fecal leukocytes. □

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Community Genetics II

BURHAN SAY, MD
KATHRYN JONES, MT
NANCY CARPENTER, PhD
MARSHA HAYES, BS
JAMES G. COLDWELL, MD

(With the technical assistance of Ms. Jan Files)

Genetic problems are common and therefore centers for diagnosis, counseling, research and training personnel in human genetics are essential. With support from various sources, a clinical genetics unit has been established.

This is the second report on the activities of the Genetics Unit of Children's Medical Center, Tulsa, Oklahoma. During the past year, the laboratory was further equipped with another microscope and a new Technicon amino acid analyzer which has greatly facilitated the study of patients with inherited metabolic disorders. The unit also receives support from outside sources especially the Oklahoma State Department of Health.

A number of university students did undergraduate and post-graduate work in human genetics and Nancy Carpenter, PhD, Assistant

Professor of Zoology at the University of Tulsa, joined the unit as a consultant. Members of the unit were involved throughout the year in lecturing in both educational and community organizations to promote better understanding of human genetics. Research papers were presented at national and international scientific meetings and were published in national and international journals.

The number of patients studied in the unit increased by 55% during 1975. Many families were also counseled as one of the functions of the unit. During 1975, 179 patients and 34 parents, sibs, and other relatives were studied for chromosome aberrations. Of these, 32 patients (15.0%) were found to have major chromosome aberrations and thirteen patients were found to have chromosome variants. Variants are minor chromosome aberrations which were, until recently, considered insignificant. Studies done in 1975 are compared with those done in 1974 in Table I.

Many well-known chromosome disorders were observed in the study population includ-

Table I
Results of Chromosome Studies on
349 Patients (1974-1975)

	Normal	Aberrant (%)	Total
1974 A—Patients	93*	21 (18.4)	114
B—Parents, sibs, etc.	20	2 (9.1)	22
			136
1975 A—Patients	146**	33 (18.4)	179
B—Parents, sibs, etc.	33	1 (2.9)	34
			213

*This figure includes 1 chromosome variant.

**This figure includes the 13 chromosome variants.

From the Department of Pediatrics, Developmental Medicine and Child Neurology, Children's Medical Center, Tulsa, Oklahoma 74135.

Table II
Abnormal Karyotypes

A Autosomal		1974	1975	Total
4p-	(Wolff-Hirschorn Syndrome)	—	1	1
5p-	(Cri-Du-Chat)	1	1	2
5q-	(Mosaic)	—	1	1
+C, +G		—	1	1
9	(Pericentric Inversion)	—	1	1
+D		1	1	2
20q+		—	1	1
+21	(Down Syndrome)	7	12	19
+21	(Mosaic Down Syndrome)	1	1	2
22q-	(Philadelphia Chromosome)	—	2	2
+Marker	(Extra Chromosome)	2	1	3
Translocation		3	—	3
		15	23	38

B—Sex Chromosomal		1974	1975	Total
X	(Turner Syndrome)	5	4	9
XX/X	(Mosaic Turner Syndrome)	—	2	2
XXq-	(Turner Variant)	—	1	1
XXY	(Klinefelter Syndrome)	2	2	4
XXYY	(Klinefelter Variant)	1	—	1
XYY		—	1	1
		8	10	18

C—Variants		1974	1975	Total
1 qh+		—	5	5
9 qh+		—	3	3
22 p+		—	1	1
Y q-		—	1	1
Y q+		1	3	4
		1	13	14

ing Down, Turner, and Klinefelter syndromes. Of the rarer entities one patient with Wolff-Hirschorn syndrome and two patients with cri-du-chat syndrome were seen. In both patients with cri-du-chat, the referring physician suspected the diagnosis because of the peculiar cry, indicating its diagnostic importance. There was one patient with cat-eye syndrome and another who also had a small extra metacentric chromosome, but whose clinical findings were not consistent with the diagnosis of cat-eye syndrome.

The analysis of eight bone marrow cultures, revealed two with the Philadelphia chromosome and a third with 48 chromosomes with the extra chromosomes being in the C and G groups. The latter is an occasional finding in patients with myeloproliferative disorders. After two years of studies no case of either XXX or trisomy 18 has been seen. In the case of XXX, it may be explained by the fact that the females usually have no clinical stigmata, which may also be the reason for the scarcity of cases of XYY males. However, there seems to be no explanation for the fact that a patient with trisomy 18 has not yet been found, although newborn studies indicate that trisomy 18 is more frequently seen than trisomy 13.¹

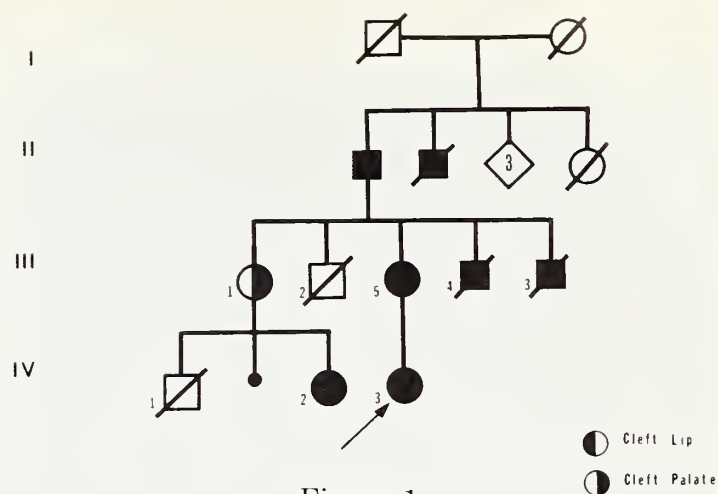


Figure 1

The chromosome aberrations seen in the past two years are shown in Table II.

Recently we have been interested in cytogenetic studies in children with psychiatric disorders because of our observation that these patients seem to have more variant chromosomes than is expected in the normal population.¹ The variants usually involve number 1 (1qh+) and number 9 (9qh+) al-

Since his graduation from the School of Medicine, University of Istanbul in 1946, Burhan Say, MD, has been certified by the American Board of Pediatrics. He is a member of the European Society of Hematology and Immunology and the European Society of Teratology.

Mrs. Kathryn Jones, BS, received her certification in medical technology in 1967 and her Bachelor of Science in horticulture from Oklahoma State University in 1974. She is chief technologist in the cytogenetic laboratory, Children's Medical Center, Tulsa, Oklahoma.

Nancy Carpenter, PhD, graduated from the University of Michigan in 1972. She is Associate in Clinical Genetics at Children's Medical Center and Assistant Professor of Zoology at the University of Tulsa, Tulsa, Oklahoma.

Marsha Hayes received her BS degree from the University of Oklahoma in 1976. She is presently a Trainee in Clinical Genetics at Children's Medical Center, Tulsa, Oklahoma.

James G. Coldwell, MD, graduated from the University of Oklahoma College of Medicine in 1955. He is a member of the American Academy of Pediatrics and the American Society of Human Genetics.



Figure 2

though other variants of chromosomes 21 and Y have also been seen. A review of the literature showed that a similar excess of variant chromosomes has been observed among patients with congenital malformations as well as in parents of children with major chromosome abnormalities.^{2, 3} The variations observed may not have any direct causal relationship with childhood psychiatric disorders in these patients, since normal people may also have similar variants. It may be that the factor(s) which cause(s) the psychiatric disorders in children are also responsible for the increased frequency of variants. A preliminary study is in progress here in the Cytogenetic Laboratory at Children's Medical Center, but it is too early to reach definite conclusions.

Many non-chromosomal familial entities were seen during the past year. One of these involved a family of American Indian ancestry whose pedigree can be seen in Figure 1. The family was of interest because dominant single gene inheritance was indicated whereas the inheritance of cleft lip and cleft palate is usu-

ally multifactorial.⁴ Only a few families like this one have been reported with single gene inheritance.⁵

A twelve-year-old boy was evaluated here for his multiple congenital malformations in association with mental retardation. He had peculiar facial features with bilateral ptosis of the eyelids, anti-mongoloid slant of the eyes, hypertelorism, and a broad nasal bridge with a thick nasal septum. His chin and lips were prominent with a pouting lower lip and he had large ears. Other findings included brachydactyly with soft wide hands and the X-rays showed tufting of the distal phalanges. (Figure 2) He also had kyphoscoliosis with a prominent sternum. (Figure 3) The findings were compatible with Coffin-Lowry syndrome which is an inherited entity with X-linked or sex-limited dominant mode of inheritance.⁶

A newborn with trigonocephaly and club feet, among other deformities, was studied. Since trigonocephaly is seen in patients with deletion of the upper arm of the number 9 chromosome (9p-)⁷ as well as deletion of the lower arm of the number 11 chromosome

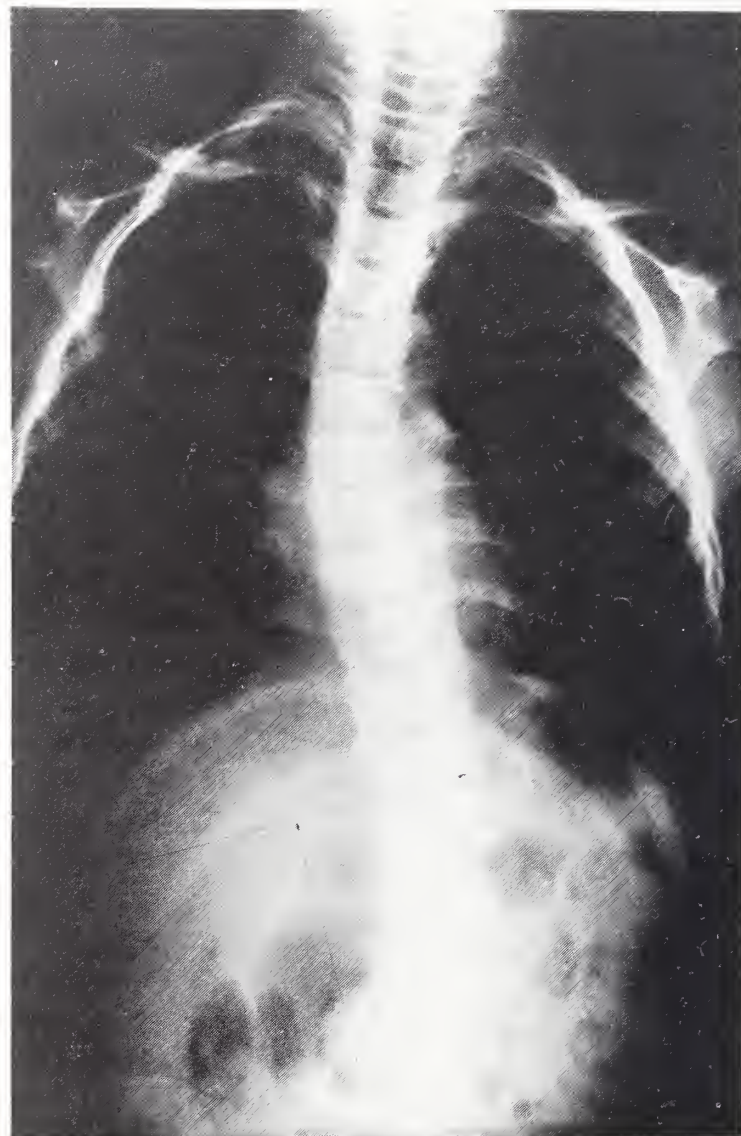


Figure 3

Table III — Clinical Findings

Case	Age/Sex	Radial Dysplasia	Imperforate Anus	Vertebral Anomalies	Eye Findings	Others
1	13 mos/F	+	+	+	Ptosis (L) Internal strabismus (L) Cloudy cornea (L)	Renal dysplasia (?) Inguinal hernia
2	15 mos/F	+	+	+	Severe myopia (-8 diopters)	Renal dysplasia 13 ribs (Bil.) T. E. fistula
3	5 yrs/F	-	+	+	Vision 20/30 (R) 20/40 (L)	Renal dysplasia
4	10 yrs/M	+	+	+	Ptosis (L) Anisocoria Heterochromia iridis	T. E. fistula ASD (?)

R—Right

L—Left

Bil.—Bilateral

ASD—Atrial septal defect

(11q-)⁸, extensive studies were undertaken to rule out these possibilities. No chromosome aberration was observed, and it was decided that the patient probably represented the entity first described by Opitz *et al.* a few years ago.⁹

Four patients of different age groups with the syndrome of radial dysplasia, imperforate anus, and vertebral anomalies¹⁰ were studied specifically for their developmental achievement. The results showed that, even though they had severe deformities, their mental development was either normal or close to normal. This finding was of particular importance because it indicated that these patients merited all necessary assistance for rehabilitation. During these studies, it was also noted that they frequently had minor eye defects which had not been emphasized previously. Ophthalmologic abnormalities may be a component of this syndrome of multiple malformations.¹¹ (Table III)

One of our patients, a three-year-old girl, created a considerable diagnostic problem. The clinical findings in the patient were compatible with the diagnosis of trichorhinophalangeal syndrome (TRPS): sparse hair, prominent nose, large ears, medial upswing of the eyebrows, and mental retardation. However, X-rays of the hands failed to show the typical findings of cone-shaped epiphysis and ivory epiphysis. The X-rays were studied by Dr. A. K. Poznanski of the University of Michigan who has developed a method of hand pattern profile analysis in which measurements are made of the long bones of the hand. The results are graphed and compared to the curve from normal patients as well as those from proven cases of TRPS and

various other entities. The curve of our patient fit that which is observed in known cases of TRPS. The results of this study were important since it showed, for the first time, that some patients with TRPS may not have the expected X-ray findings. Hand pattern profile analysis is a useful method for correctly diagnosing patients with certain hand abnormalities.¹²

The increasing number of referrals to the Genetics Unit indicates that further expansion of the services will continue, and it is hoped that facilities for prenatal diagnosis will soon be available.

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Professional Ethics and Advertising

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Advertising by the "professions" is less restricted. What hangs in the balance is the manner in which the Oklahoma physicians tackle this sensitive ethical issue.

I. INTRODUCTION

This article depicts the changing attitudes towards advertising by the "learned professions," in particular the medical and the legal, during the past Bicentennial Year.

Historically, both the medical and legal professions have contended that advertising was *unethical*. However, in light of the 1975 decisions of the United States Supreme Court, the legal profession moved with expediency to amend its Code of Professional Responsibility thereby easing the curbs on lawyer advertising. In February, 1976, the 348-member House of Delegates, which sets the official pol-

icy of the American Bar Association (ABA), amended the Code of Professional Responsibility allowing limited advertising by lawyers including prices and other relevant information. The amendment passed by a standing vote of 158 to 108.¹

In April, 1976, the Judicial Council of the American Medical Association (AMA) adopted a "clarifying statement" in regard to the *Principles of Medical Ethics* which permits a limited form of advertising by physicians not only in telephone directories but also in "reputable directories," and which could include "biographical and other relevant data," fee information for office visits and specific types of services, "but false, misleading or deceptive statements or claims should be avoided."²

While the ABA and the AMA are attempting to maintain control over the type of advertising to avoid "hucksterism," the pharmacists, on the other hand, have had to swallow their own pills. On May 24, 1976, the US Supreme Court ruled by a vote of seven to one that states may *not* prohibit advertising of prescription drug prices.³

II. JUDICIAL DECISIONS AND ADVERTISING

The following caselaw provides a review of the landmark cases which have resulted in an

impressive and dramatic alteration in the thinking, interpretation and indeed amendment of the Codes of Ethics, or Professional Responsibility, by the "learned professions" including dentists, attorneys, medical doctors and pharmacists.

1. *Semler v. Oregon State Board of Dental Examiners* (1934)⁴

In 1934, the US Supreme Court had the occasion to pass on an Oregon Statute which severely restricted advertising by dentists in Oregon. In the historic *Semler* case, the Supreme Court *rejected* a Fourteenth Amendment due process and equal protection challenge to the Oregon Statute in question. The Court reasoned that the public is particularly susceptible to promises of physical relief and could easily be misled. Hence, it is proper, the Court held, to apply a different standard to dentists than to others engaged in a competitive market. The Court felt that the public has an interest not only in guarding against deception, but also in protecting the morale of the profession against an "unseemly rivalry which would enlarge to opportunities of the least scrupulous." *The Court*, in the *Semler* Case, *supported a general prohibitory rule*, despite the fact that it prohibited both nondeceptive and deceptive advertising. *By analogy, the prohibitory rule in the Semler Case seemed to apply to the medical and legal professions as well.* The feeling was that the so-called "learned professions" were not subject to the antitrust laws.

2. *Head v. Board of Examiners* (1963)⁵

In 1963, the US Supreme Court also upheld a New Mexico statute that prohibited advertising by the quotation of prices or terms for the sale of eyeglasses. As in the *Semler* Case, the *Head* case supported the 1934 prohibitory rule, even though it prevented nondeceptive as well as deceptive advertising.

3. *Goldfarb v. Virginia State Bar* (1975)⁶

In June, 1975, the US Supreme Court, passed on the permissibility of the minimum fee schedule in the *Goldfarb* case and found that there was no such exception for the "learned profession" in the Sherman Act. The Court stated further that the nature of the legal profession does not in and of itself create any immunity under the Sherman Act. Thus, the legal profession was told in no uncertain terms that antitrust laws would be applied to the private practice of law and for that matter to all the "learned professions." The Supreme Court deci-

sion was somewhat tempered, however, by the statement in Footnote 17:

The fact that a restraint operates upon a profession as distinguished from a business is, of course, relevant in determining whether that particular restraint violates the Sherman Act. It would be unrealistic to view the practice to professions as interchangeable with other business activities, and automatically to apply the professions antitrust concepts which originated in other areas. The public service aspect, and other features of the professions, may require that a particular practice, which could properly be viewed as a violation of the Sherman Act in another context be treated differently. We intimate no view on any other situation than the one with which we are confronted today.

One may discern that in the absence of sufficient state action, Footnote 17 may stand for the proposition that each alleged antitrust violation mandated by the legal profession would be subjected to a rule of reason, balancing the harmful and beneficial effects of self-imposed regulations on the conduct of lawyers.

Among others, two precedents were cited in the *Goldfarb* case which were decided differently. The first is the case of *Parker v. Brown* (1943)⁷ in which the Court held that an anticompetitive marketing program "which derived its authority and efficacy from the legislative command of the state" was not a violation of the antitrust law because the Sherman Act was intended to regulate private practices and that a state could impose restraints on trade as an act of government. It would appear that anticompetitive activities which are compelled by direction of the state acting as "sovereign" will not be subject to antitrust laws.

The second precedent cited in *Goldfarb* is the case of the *US v. Oregon State Medical Society* (1952)⁸. Here, the US Supreme Court did acknowledge that in some instances a State may determine that "forms of competition usual in the business world may be demoralizing to the ethical standards of a profession."

In *Goldfarb*, also, the Supreme Court recognized the existence of a compelling State interest in the practice of the professions, and it acknowledged that States have a broad power to establish standards for licensing and regulating professional practitioners. The Court did not intend to diminish such authority.

However, despite the above precedents, the US Supreme Court held in the *Goldfarb* case

"that certain anticompetitive conduct by lawyers is within the reach of the Sherman Act." This holding rudely awakened the legal profession that found itself in a brand new era; challenged to swiftly amend its Code of Professional Responsibility, otherwise confront the possibility of total loss of self-regulation and control of lawyer conduct with respect to prices.

4. *Bigelow v. Virginia* (1975)⁹

Immediately following the *Goldfarb* case, the US Supreme Court handed down its decision in the *Bigelow* case. The Court held that *commercial advertising falls within the protection of the First Amendment of the United States Constitution*. *Bigelow* was a newspaper editor who published an advertisement in Virginia which announced abortion services available in New York. At the time of the advertisement, both abortions and advertisements about them were legal in New York but not in Virginia. *Bigelow* was convicted of a misdemeanor. The Supreme Court overturned his conviction concluding that the First Amendment guarantees of speech and press were available to this paid commercial advertisement by stating that "our cases . . . clearly establish that speech is not stripped of First Amendment protection merely because it appears in that form." However, First Amendment protections for commercial advertising are not absolute and depend in part on the degree of public interest and information that is included within the challenged advertisement. The courts will balance the First Amendment interests vis-a-vis the public interest which is allegedly furthered by the regulations that restrict speech. Therefore, the Supreme Court did not strip the states of the power to regulate professional activity in the public interest. The Court stated in Footnote 10 in the *Bigelow* case that ". . . Our decision also is in no way inconsistent with our holdings in the Fourteenth Amendment cases that concern the regulation of professional activity. See . . . *Semler v. Dental Examiners*. 294 US 608 (1934)."

III. CONCLUSION OF JUDICIAL DECISION

Restrictions on advertising by the "learned professions" including the medical, legal and dental professions confront two hurdles, the

first being a violation of the Sherman Act dealing with antitrust laws, and the second a deprivation of individuals the constitutional guarantees of freedom of speech and press under the first Amendment of the United States Constitution. Although there is no blanket prohibition or automatic invalidation of advertising restrictions, it is obvious, however, that the "learned professions" will have to justify whatever restrictions or prohibitions they elect to adopt, and the Court will have to determine what effect those restrictions or prohibitions have upon competition and free speech.

The Supreme Court has lifted the prohibitory restrictions pertaining to advertising of prescription drugs prices, thereby invalidating all restrictive state statutes and professional ethical prohibitions by pharmacists with regard to advertising.

IV. OKLAHOMA STATUTES ON PRICE ADVERTISING

Title 59 of Oklahoma Statutes, §§736.1-736.3, state:

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John M. Amick, an Oklahoma City attorney, is presently President of the Oklahoma County Bar Association and since June, 1976, has served as General Counsel for the Oklahoma Bar Association. A 1949 graduate of the University of Oklahoma College of Law, Mr. Amick has served as Assistant County Attorney in Oklahoma County and as Assistant United States Attorney for the Western District of Oklahoma. He was elected to the office of Associate District Judge in Oklahoma County in 1969. Mr. Amick has served as adjunct Professor of Law in the Oklahoma City University School of Law.

Section 1. Service, Commodity or Material Requiring Examination or Prescription Prohibited — Hearing Aids and Trusses Excepted: No person, firm, or corporation, or a member of any professional group regulated and defined by the Statutes of Oklahoma, shall advertise the price of any service, commodity, or material which requires a prior examination and/or prescription by and/or from a person licensed to practice a healing art in this State as defined by Title 59, Oklahoma Statutes 1961, to determine the proper service, commodity, or material to be rendered or delivered to the user or consumer thereof for the purpose of the correction or relief of any abnormalities or deformities of the human body. Provided this Act shall not prohibit the advertisement of hearing aids, and/or trusses.

(59 O.S. 1961, §§736.1)

Section 2. Injunction: Provided that any violation hereof shall be enjoined by any court having jurisdiction of the parties on the application or petition of the county attorney of the county in which the violation occurred, and upon his refusal, by the Attorney General.

(59 O.S. 1961, §§736.2)

Section 3. Newspapers and Advertising Mediums Not Liable; Treatment by Prayer or Spiritual Means; Hospitals: Provided further that the provisions of this act shall not render any newspaper or other advertising medium liable in damage for running any ad furnished them by a vender of said commodity or material. Provided, that this Act will not apply to persons who treat or attempt to treat abnormalities or deformities of the human body by prayer or spiritual means, nor to hospitals, cooperative, or otherwise.

(59 O.S. 1961, §§736.3)

As mentioned previously, the statutory restrictions regarding advertising of prescription drugs prices have been rendered obsolete by the Supreme Court. In Oklahoma, it is noteworthy that prohibition of price advertising is limited to "a person licensed to practice a healing art." No other profession is restricted by a similar statute. In light of the current thinking and opinions of the US Supreme Court, presently one might challenge the constitutionality of the above 1961 Oklahoma statutes under the First Amendment.

The Supreme Court concluded in *Bigelow* that the Virginia courts were wrong in assuming that advertising, as such, was entitled to no First Amendment protection and that *Bigelow* had no legitimate First Amendment interest. But, the Court did not decide the precise extent to which the First Amendment permits regulation of advertising that is related to activities that states may legitimately regulate or even prohibit.

5. *Chicago Council of Lawyers v. Bauer* (1975)¹⁰

In this case, the Seventh Circuit Court held that the no-comment-fair trial provision of the Code of Professional Responsibility of the legal profession is unconstitutional. The Court considered the blanket prohibition against pre-trial comment in the Code and balanced the litigant's right to fair trial as against the lawyer's right to free speech. The Court held that where the freedom of speech and fair trial rights conflict, the right to fair trial takes precedence, but that any First Amendment restrictions must be narrowly defined.

6. *Person v. Association of the Bar* (1975)¹¹

Here, Person sought to enjoin the enforcement of the Code of Professional Responsibility which prevents him from advertising his legal specialty and hourly rate in the telephone directory. Judge Platt, granting the motion for a three-judge court, stated that "Moreover, the fact is that, while research has disclosed that the United States Supreme Court has upheld the constitutionality of state regulation in banning of advertising in other professions, there do not appear to be comparable decisions with respect to state statutes banning and regulating advertising by attorneys."

7. *Virginia Citizens Consumer Council, Inc. v. State Board of Pharmacy* (1974)¹²

In this case, a three-judge district court in Virginia invalidated Virginia Statute which imputed unprofessional conduct to a pharmacist who published fee information regarding prescription drugs. The Court concluded that the law violated the citizens First Amendment right to know because the information sought would not deceive the public but rather serve to educate.

The *Consumer Council* contended that individuals have right to receive information about prices of prescription drugs in advertising under the constitutional guarantee of the freedom of the press. In May 1975, the US Supreme Court affirmed the decision of the district court in this case by a vote of seven to one, ruling that states may *not* prohibit advertising of prescription drug prices. The opinion of the Supreme Court, rendered by Justice Blackmun stated that there is "an alternative to this paternalistic approach. That alternative is to assume that this information is not in itself harmful, that people will perceive their own best interests if only they are well enough informed, and that the best means to that end is

to open the channels of communication rather than to close them." While the Supreme Court ruling could conceivably affect the medical and legal professions by analogy, it fell short of striking down the traditional ban on advertising by the medical and legal professions, cautioning that restrictions on advertising in these fields "may require consideration of quite different factors."³

V. THE AMERICAN BAR ASSOCIATION (ABA) AND ADVERTISING

Immediately following the decision of the Supreme Court in the *Goldfarb* and the *Bigelow* cases, the ABA Standing Committee on Ethics and Professional Responsibility moved with unprecedented haste to amend its Code of Professional Responsibility. On December 6, 1975, a conference on lawyer advertising was sponsored by the ABA in Chicago, Illinois, to hear the reports of the Ethics Committee and to obtain some reaction prior to the mid-winter meeting of the ABA in February, 1976. The following is the complete text of the Amendments that were proposed in the new D.R.2-101:

D.R. 2-101. Publicity and Advertising

(A) A lawyer shall not, on behalf of himself, his partner, or associate, or any other lawyer affiliated with him or his firm, use or participate in the use of any form of public communication containing a false, fraudulent, misleading, deceptive, or unfair statement or claim. A "public communication" as used herein includes, but is not limited to, communication by means of television, radio, motion pictures, newspaper, book, law list, or legal directory.

(B) A false, fraudulent, misleading, deceptive or unfair statement or claim which:

- (1) contains a misrepresentation of fact;
- (2) is likely to mislead or deceive because in context it makes only a partial disclosure of relative facts;
- (3) contains a client's laudatory statements about a lawyer;
- (4) is intended or is likely to create false or unjustified expectations of favorable results;
- (5) implies unusual legal ability, other than as permitted by D.R. 2-105 [designation of specialty and statement of limitation of practice];
- (6) relates to legal fees other than a standard consultation fee or a range of fees for specific types of services without fully disclosing all variables and other relevant factors;
- (7) conveys the impression that the lawyer is in a position to influence improperly any

court, tribunal, or other public body or official;

(8) is intended or likely to result in a legal action or legal position being taken or asserted merely to harass or maliciously injure another;

(9) is intended or is likely to appeal primarily to a lay person's fear, greed, desires for revenge, or similar emotions;

(10) contains other representations or implications that in reasonable probability will cause an ordinary, prudent person to misunderstand or be deceived.

(C) A lawyer shall not compensate or give anything of value to a representative of the press, radio, television, or other communication medium in anticipation of or in return for professional publicity unless the fact of compensation is made known in such publicity.¹³

The proposed new disciplinary rule was elaborated upon principally in the revised Ethical Consideration 2-8 and the new Ethical Consideration 2-8A, as follows:

E.C. 2-8. Selection of a lawyer by a lay person should be informed. Advice and recommendations of third parties — relatives, friends, acquaintances, business associates, or other lawyers — and proper publicity may be helpful. Advertisements and public communications, whether in law lists, announcement cards, newspapers or other forms, should be formulated to convey only information that is necessary to make an appropriate selection. Self-laudation should be avoided. Information that may be helpful in some situations would include: (1) office information, *eg*, name, including name of firm and names of professional associates; addresses; telephone numbers; and office hours; (2) biographical data; and (3) description of the practice, *eg*, one or more fields of law in which the lawyer or law firm concentrates; a statement that practice is limited to one or more fields of law; and a statement that the lawyer or law firm specializes in a particular field of law or law practice but only if authorized by the rules of the authority having jurisdiction under state law over the subject of specialization.

The proper motivation for commercial publicity by lawyers lies in the need to inform the public of the availability of competent, independent legal counsel. The public benefit derived from advertising depends upon the usefulness of the information provided to the community or to the information provided to community or to the segment of the community to which it is directed. Advertising marked by excesses of content, volume, scope or frequency, or which unduly emphasizes unrepresentative biographical data, does not provide that public benefit. For example, undue prominence should not be given to a prior governmental position outside the context of biographical information. Similarly, the use of media whose scope or nature clearly

suggests that the use is intended for self-laudation of the lawyer without concomitant benefit to the public does not serve the public need. Improper advertising may hinder informed selection of competent, independent counsel, and advertising involving excessive cost may unnecessarily increase fees for legal services.

E.C. 2-8A. Advertisements and other public communications should make it apparent that the necessity and advisability of legal action depends on variant factors that must be evaluated individually. Fee information usually will be incomplete and misleading to a lay person. Therefore, public communications should not attempt to give fee information beyond a statement of a standard consultation fee, a statement of a range of fees for specific types of legal services, and the availability of credit arrangements. Because of the individuality of each legal problem, public statements regarding average, minimum or estimated fees normally will be deceiving as will commercial publicity conveying information as to results previously achieved, general or average solutions, or expected outcomes. For example, it would be misleading to advertise a set fee for a divorce case without disclosing the fact that the particular lawyer will not accept employment by every potential client for that fee. Advertisements or public claims that convey an impression that the ingenuity of the lawyer rather than the justice of the claim is determinative are similarly improper. Statistical data based on past performance or prediction of future success is deceptive because it ignores important variables. The context of factual assertions and opinions should be clearly evident in all public communications. It is improper to claim or imply an ability to influence a court, tribunal, or other public body or official by other than competent representation of a just cause. Commercial publicity and public communications should indicate the seriousness of undertaking any legal action. Not only must commercial publicity be truthful but its accurate meaning must be apparent to the lay person with no legal background. Any commercial publicity for which payment is made should so indicate.¹³

In February, 1976, the House of Delegates of the ABA meeting in Philadelphia, Pennsylvania, did amend the Code of Professional Responsibility and broadened the scope of information that a lawyer may provide to the public in legal directories, law lists and the yellow pages of the telephone directories. The amendments were basically a recognition of the fact that many laymen need help in selecting legal counsel, and such information would serve the layman to hopefully make a more informed selection. The following are the adopted amendment changes in disciplinary

Rules 2-102 (A) (5) and (6) with the italicized material being the additions and the bracketed material representing the deletions:

(A) A lawyer or law firm shall not use *or participate in the use of* professional cards, professional announcement cards, office signs, letterheads, telephone directory listings, law lists, legal directory listings, or similar professional notices or devices, except that the following may be used if they are in dignified form:

(5) A listing of the office of a lawyer or law firm in the alphabetical and classified sections of the telephone directory or directories for the geographical area or areas in which the lawyer resides or maintains offices or in which a significant part of his clientele resides and in the city directory of the city in which his or the firm's office is located; but the listing *in the alphabetical section* may give only the name of the lawyer or law firm, the fact he is a lawyer, addresses, and telephone numbers, *and the listing in the classified section must comply with the provisions of DR 2-102 (A)(6).* The listing shall not be in distinctive form or type. A law firm may have a listing in the firm name separate from that of its members and associates. The listing in the classified section shall not be under a heading or classification other than "Attorneys" or "Lawyers," except that additional headings or classifications descriptive of the types of practice referred to in D.R. 2-105 are permitted.

(6) A listing in a reputable law list, (or) legal directory, *a directory published by a state, county or local bar association, or the classified section of telephone company directories* giving brief biographical and other informative data. A law list or *any* directory is not reputable if its management or contents are likely to be misleading or injurious to the public or to the profession. A law list *or any directory* is conclusively established to be reputable if it is certified by the American Bar Association as being in compliance with its rules and standards. The published data may include only the following: name, including name of law firm and names of professional associates; addresses and telephone numbers; one or more fields of law in which the lawyer or law firm concentrates [;], a statement that practice is limited to one or more fields of law [;], *or a statement that the lawyer or law firm specializes in a particular field of law practice, to the extent permitted by the authority having jurisdiction under state law over the subject and in accordance with rules prescribed by that authority;* [but only if authorized under D.R. 2-105(A)(4);] date and place of birth; date and place of admission to the bar of state and federal courts; schools attended, with dates of graduation, degrees, and other scholastic distinctions; public or quasi-public offices; military service; posts of honor; legal authorships; legal teaching positions; memberships, offices,

committee assignments, and section memberships in bar associations; memberships and offices in legal fraternities and legal societies; technical and professional licenses; memberships in scientific, technical and professional associations and societies; foreign language ability; names and addresses of references, and, with their consent, names of clients regularly represented: *whether credit cards or other credit arrangements are accepted; office and other hours of availability; a statement of legal fees for an initial consultation or the availability upon request of a written schedule of fees or an estimate of the fee to be charged for the specific services; provided, all such published data shall be disseminated only to the extent and in such format and language uniformly applicable to all lawyers, as prescribed by the authority having jurisdiction by state law over the subject.*¹⁴

The amended Code of Professional Responsibility has apparently fallen short of satisfying the Justice Department and the Antitrust Division of the Attorney General's Office.¹⁵

Prior to adoption of the amended Code, the ABA was sued by the *Consumer's Union of the United States, Inc.*, that claimed that the disciplinary rule 2-102 (A)(6), regulating the information ethically includable in the Bar-authorized legal directories constitutes a prior restraint on and a violation of plaintiff's First Amendment rights to gather, publish, convey and receive factual information necessary to afford proper access to the legal system. The suit was filed in Virginia, presumably because the Virginia Bar Association had held it would be improper for an attorney to have his name included in the Consumer's Union publication. The case is pending. The battle seems to be shaping up as to who can be permitted to publish a directory, the legal profession, Consumer's Union or both.

VI. THE OKLAHOMA BAR ASSOCIATION (OBA) AND ADVERTISING

Following the amendments to the Code of Professional Responsibility by the ABA, the Oklahoma Bar Association appointed a Special Committee on Informational Advertising, chaired by Edward O. Monnet of Tulsa, Oklahoma. The Committee studied in detail and subsequently proposed amendments to the OBA Code of Professional Responsibility. The textual material of the proposed amendments are published in the May issue of the Journal

of the Oklahoma Bar Association.¹⁵ The amendments were considered on May 22, 1976, by the House of Delegates of the Oklahoma Bar Association. Decision was deferred pending clarification of lawyer specialties.

VII. THE AMA AND ADVERTISING

On December 19, 1975, the Federal Trade Commission (FTC), initiated proceedings against the AMA's ban on patient solicitation by member physicians. The complaint against the AMA dealt with the ethical restrictions on physician advertising and the AMA was joined in the complaint with the New Haven County Medical Association and the Connecticut State Medical Society. A move was made by the AMA to throw out the FTC's suit, but this was rejected by an FTC administrative judge.¹⁶ A hearing was scheduled for October 18, 1976. The AMA contends that the Federal Agency has no jurisdiction over a nonprofit association of physicians. This jurisdictional issue will be dealt with at the forthcoming hearing.

Meanwhile, the Judicial Council of the AMA has *not* been idle. The following is the complete text of the Judicial Council's statement of the AMA, clarifying the policy on advertising by medical doctors:

This statement reaffirms the long-standing policy of the Judicial Council on advertising and solicitation by physicians. The *Principles of Medical Ethics* are intended to discourage abusive practices which exploit patients and the public and interfere with freedom in making an informed choice of physicians and free competition among physicians.

ADVERTISING

The *Principles* do not proscribe advertising; they proscribe the solicitation of patients. Advertising means the action of making information or intention known to the public. The public is entitled to know the names of physicians, the type of their practices, the location of their offices, their office hours and other useful information that will enable people to make a more informed choice of physician.

The physician may furnish this information through the accepted local media of advertising or communication which are open to all physicians on like conditions. Office signs, professional cards, dignified announcements, telephone directory listings and reputable directories are examples of acceptable media for making information available to the public.

A physician may give biographical and other relevant data for listing in a reputable directory. A directory is not reputable if its

contents are false, misleading or deceptive, or if it is promoted through fraud or misrepresentation. If the physician at his option chooses to supply fee information, the published data may include his charge for a standard office visit or his fee or range of fees for specific types of services, provided disclosure is made of the variable and other pertinent factors affecting the amount of the fee specified. The published data may include other relevant facts about the physician, but false, misleading or deceptive statements or claims should be avoided.

Local, state or specialty medical associations, as autonomous organizations, may have ethical restrictions upon advertising, solicitation of patients, or other professional conduct of physicians which exceed the *Principles of Medical Ethics*. Furthermore, specific legal restrictions upon advertising or solicitation of patients exists in the medical licensure laws of at least thirty-four states. Other states provide regulation through statutory authority to impose penalties for unprofessional conduct.

SOLICITATION

The term "solicitation" in the *Principles* means the attempt to obtain patients by persuasion or influence using statements or claims which (1) contain testimonials; (2) are intended or likely to create inflated or unjustified expectations of favorable results; (3) are self-laudatory and imply that the physician has skills superior to other physicians engaged in his field or specialty of practice; or (4) contain incorrect or incomplete facts, or representations or implications that are likely to cause the average person to misunderstand or be deceived.

COMPETITION

Some competitive practices accepted in ordinary commercial and industrial enterprises — where profit making is the primary objective — are inappropriate among physicians. Commercial enterprises, for example, are free to solicit business by paying commissions. They have no duty to lower prices to the poor. Commercial enterprises are generally free to engage in advertising "puffery," to be boldly self-laudatory in making claims of superiority, and to emphasize favorable features without disclosing unfavorable information.

Physicians, by contrast, have an ethical duty to subordinate financial reward to social responsibility. A physician should not engage in practices for pecuniary gain which interfere with his medical judgment and skill or cause a deterioration of the quality of medical care. Ability to pay should be considered in reducing fees and excessive fees are unethical.

Physicians should not pay commissions, rebates or give "kickbacks" for the referral of patients. Likewise, they should not make extravagant claims or proclaim extraordinary

skills. Such practices, however common they may be in the commercial world, are unethical in the practice of medicine because they are injurious to the public.

Freedom of choice of physician and free competition among physicians are prerequisites of optimal medical care. The *Principles of Medical Ethics* are intended to curtail abusive practices which impinge upon these freedoms and exploit patients and the public.²

The statement by the Judicial Council that fee information by physicians may be made available and that reputable directories are permissible is indeed a relaxation to a limited degree of the total prohibition of advertising. Such a move by the Judicial Council may be construed as an effort to yield to some degree to the allegations by the FTC, while at the same time attempting to prevent physicians from uttering false, misleading or deceptive statements or claims which would only serve to degrade the principles of medical ethics. Whether such a move would result in the AMA coming out victoriously against the FTC allegations pertaining to advertising by MDs remains to be seen.

VIII. CONCLUSIONS AND RECOMMENDATIONS

The following delineates what has been stated in a concise, succinct summary. It is an excerpt of an address by President R. William Ide, III, Young Lawyers Section of the ABA, sent to ABA Standing Committee on Ethics and Professional Responsibility:

A. TOTAL PROHIBITION OF ADVERTISING IS NEITHER PROFESSIONALLY OR LEGALLY DEFENSIBLE.

B. WIDE-OPEN ADVERTISING, WHILE IT MAY OBVIATE THE LEGAL ISSUES, FALLS SHORT OF IMPORTANT PROFESSIONAL AND PUBLIC GOALS, BECAUSE:

1. fraud on the public can only be remedied after the fact;

2. advertising too often draws attention away from important considerations and focuses on emotions;

3. financial inequality; advertising will favor big firms and established practitioners, when in fact the young lawyer may offer the least expensive service;

C. TWO VIABLE ALTERNATIVES ARE ENVISIONED:

1. LEGAL [AND MEDICAL] DIRECTORIES

(a) This appears to be the best method of getting *accurate* and *pertinent* information before the public;

(b) Local bar [and medical] associations should be primarily responsible for compilations of this information and getting it to the public;

(c) The ABA [and AMA] must amend the rules to allow individual attorneys to respond with all pertinent information;

(d) It is probably desirable to encourage third party public interest groups to participate in this program, or even to develop their own directories;

(e) A more comprehensive and reliable specialty certification program will be a necessity and should be maintained under the auspices of the ABA [and AMA];

(f) The specialty program should not be restricted by years in practice but should rather be geared to proof of competence and actual experience.

2. RESTRICTED ADVERTISING

(a) Some limitations on advertising are desirable in order to:

(i) protect the public from fraudulent misrepresentation and misleading statements;

(ii) exclude superfluous representations which are not pertinent to a knowledgeable choice of counsel; and

(iii) limit the cost of advertising so as to reduce discriminatory effect against those with less financial resources.

(b) The Bar [and AMA] should formulate guidelines:

(i) establishing acceptable format; eg limitations as to size and acceptable media;

(ii) limiting the information which may be included in an advertisement to that which is pertinent and meaningful. For example:

—office hours

—hourly charge

—cost of certain simple legal matters

—specialty certification

—areas of practice

(c) This type of advertising is especially suited to institutional legal services including prepaid legal service organizations and clinics;

(d) This plan might be limited at the onset to

the above organizations and expanded to individual attorneys only after refinement and evaluation.

D. SUMMARY

Change is necessary. If the Bar [and AMA] fails to take a responsible position in an attempt to conform to the law and the needs of the public, it will lose the privilege and duty of self-government.

The two plans which are outlined are only a beginning. They need refinement and additional input. Whether one or both or some other plan is chosen, it is imperative that the Bar [and AMA] act quickly to preserve public interest and professional independence.¹⁷

It is recommended that the Oklahoma State Medical Association confront this very important issue and deal with it in an honorable manner, in hopes of meeting the needs of the public while maintaining the honor and dignity of the ethical standards of its membership. The "clarifying" statement of the Judicial Council of the AMA with regards to the *Principles of Medical Ethics* provides guidance, but the ultimate decision remains in the State Medical Association.

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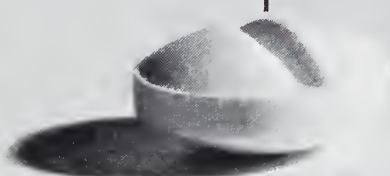
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Submitted for publication June 1st, 1976.

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250 mg

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When Big Ben looks "a little off"...

Antivert[®]/25 (meclizine HCl) 25 mg. Tablets for vertigo*

■ **Most Widely Prescribed**—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

■ **Relief of Nausea and Vomiting**—Antivert/25 can relieve the nausea and vomiting often associated with vertigo*.

■ **Dosage for Vertigo***—The usual adult dosage for Antivert/25 is one tablet t.i.d.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG 
A Division of Pfizer Pharmaceuticals
New York New York 10017



News From The Oklahoma State Department of Health

Oklahoma Tuberculosis Morbidity

1975 was the first year of reporting tuberculosis cases according to the revisions in the "Diagnostic Standards and Classifications of Tuberculosis and Other Mycobacterial Diseases" prepared by the American Thoracic Society. The new recommendations for counting and reporting tuberculosis are that cases are counted when there is culture positive bacteriology, and in the absence of bacteriologic confirmation persons with symptoms and/or signs compatible with a progressive diagnostic process and a positive skin test. This will include persons who have had tuberculosis disease in the past and again meet the new recommendations. Statistics for 1975 reflected an increase in the number of reported cases over 1974 by 87 cases and 1976 statistics reflect an increase of 33 cases over 1975.

Number of Tuberculosis Cases for Oklahoma

1974	1975	1976
282	369	398
(268)*	(311)*	(321)*

*Number bacteriological positive by culture.

Also in 1975 it was recognized that most tuberculosis patients did not have to routinely be hospitalized and the last Oklahoma Tuberculosis Sanatorium at Talihina was closed. Patients needing hospitalization are now admitted to general hospitals when they meet the admission criteria for the Oklahoma State Tuberculosis Hospitalization Plan. There has been a significant reduction in the number of patients being hospitalized. There were 247 patients hospitalized in 1974; 81 in the first six months of 1975 and only 23 in the last six months of 1975 (after closing the sanatorium) and 30 in 1976. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR DECEMBER 1976

DISEASE	December 1976	December 1975	November 1976	Total To Date	
				1976	1975
Amebiasis	1	1	1	14	32
Brucellosis	—	3	—	7	6
Chickenpox	126	173	50	1792	1367
Encephalitis, Infectious	2	—	4	26	57
Gonorrhea (Use Form ODH-228)	1012	1228	1088	13268	13278
Hepatitis, A, B, Unspecified	96	70	97	1309	836
Leptospirosis	1	—	—	2	—
Malaria	—	—	—	3	2
Meningococcal Infections	5	1	1	27	14
Meningitis, Aseptic	5	9	3	38	87
Mumps	100	56	69	902	351
Rabies in Animals	18	7	20	183	108
Rheumatic Fever	1	—	—	14	10
Rocky Mountain Spotted Fever	—	3	2	96	89
Rubella	5	9	5	80	103
Rubella, Congenital Syndrome	—	—	—	—	2
Rubeola	5	123	6	306	271
Salmonellosis	12	19	29	260	268
Shigellosis	11	39	1	180	336
Syphilis, Infectious (Use Form ODH-228)	4	8	7	100	94
Tetanus	—	—	—	—	—
Tuberculosis, New Active	31	28	28	384	313
Tularemia	1	—	1	9	9
Typhoid Fever	—	2	—	1	3
Whooping Cough	3	3	3	26	28

Oklahoma State Medical Association

European ADVENTURE



**Departing Oklahoma City, Okla.
on July 4, 1977
and Returning on July 17, 1977**

Discover fairytale castles set midst deep, dark green forests . . . lush emerald meadows and valleys nestled between rugged mountains under the bluest of skies.

This and more awaits you when you join us for a two-week, do-as-you-please holiday in ZURICH, Switzerland; MUNICH, Germany; and VIENNA, Austria.

Price is a low \$1,398.00, which includes round-trip air fare via chartered jet, accommodations at deluxe hotels in each city, chartered first-class European express trains between cities, full American breakfasts and dinners at a selection of the finest restaurants. You can't find a better travel bargain anywhere.

Join us today for the Adventure of a lifetime at charter-cost savings.

Send To: Oklahoma State Medical Assoc.
601 N.W. Expressway
Oklahoma City, Okla. 73118

Enclosed is my check for \$_____ (\$100 per person) as deposit.

NAMES _____

ADDRESS _____

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ZIP _____ PHONE _____

A Non-Regimented INTRAV Deluxe Adventure

Medical Leaders

More government. More controls. More spending.

Before the more than 600 participants in the American Medical Association's National Leadership Conference had even left for Chicago, they knew what was in store . . . the threat of more government spending, more government controls and just plain more government. It's nothing new . . . it's something which has been with us for many years and which has been growing at an alarming rate. When the conference was over, nothing had changed except everyone had a better understanding of how government plans bring all this about.

Early in the meeting James S. Todd, MD, an AMA delegate from New Jersey, set the mood for the 5th annual conference by warning he was concerned that "Our profession is being stolen out from under us, as much by default as anything else—and we are allowing it to happen."

He spoke of a national attitude of frustration, an absence of direction and an ill-defined but generalized anger which divides, deforms and attacks those institutions which until recently were held sacred. Doctor Todd warned that national health insurance as envisioned by many could make the profession of medicine a public utility with mandated service and controlled facilities.

On this occasion last month medicine was doing much more than talking to itself, something for which it is often criticized. On hand was Senator Herman Talmadge, (D-Georgia), who is chairman of the Senate Subcommittee on Health . . . also present was Senator Thomas F. Eagleton, (D-Missouri), who serves on the Senate's Labor and Public Welfare Subcommittee on Health, HEW's Labor Subcommittee on Appropriations, and the Special Committee for Aging.

If Senators Talmadge and Eagleton, Doctor Todd and the rest of the participants at the conference could only speculate about what government medicine and national health insurance would bring, two doctors and a health administrator from England were able to do much more. They brought with them an understanding of national health insurance as practiced under the British Health Service and they brought with them a warning of what more government-medicine could mean in the United States.

No one knows better than the English what national health insurance means. They were not entirely critical because the system the British had prior to 1948 was even worse. But they did speak plainly about medicine in England, and their message was clear enough to convince most of the participants that it is a system we do not want here.

But even before the British described what it was like, three prognosticators of national renown told the group what could be in store for them. George Gallup, Jr., of Gallup Poll fame, said although doctors consistently rank high in popularity polls, they are not popular with blacks, low income groups and the uneducated. He warned that these groups are becoming more and more politically active and that doctors must do something to become more attractive to these groups of people. He also said both the present health care system and federally financed national health care plans are losing support, and he encouraged the medical profession to take steps to either reinforce the present system or to present an alternative to federal financing of NHI.

Richard M. Scammon, director, Elections Research Center, Washington, D.C., reflected on the 1976 presidential election, pointing out that 1976 was the first election

Examine The Issues

in many years in which neither a conservative nor a liberal had won the nomination of one of the major parties. He said the moderate position of both the candidates was an indication of the ambivalence the people feel toward government and elections. For the next four years, said Scammon, the economy will be the bottom line and if any of President Carter's proposals cause inflation to rise, Republicans will probably make sizable gains in the 1978 and 1980 elections.

Accepting this obvious opportunity to take a job at the federal government, George F. Will, PhD, a nationally syndicated columnist and contributing editor to *Newsweek Magazine*, delighted the audience saying, "If you want to keep your confidence in either the law or sausage, you don't want to see how either is made." However, said Wills, due to government lawmaking, the federal government now spends 28.6 per cent of all health care dollars. Will said there is a bipartisan government support for catastrophic health insurance, plus a strong desire to correct the "maldistribution" of health care skills.

In a refreshing departure from what all but the political experts expected, Senator Thomas Eagleton predicted that Congress would not move toward national health insurance (Kennedy-Corman) due to the overriding cost factors and the state of the economy. He said there is no way President Carter can fulfill his promise of both a balanced budget and national health insurance if he opts for the Kennedy-Corman proposal. (Kennedy-Corman is the most expensive of the major bills proposed so far. It is estimated that this proposal would add an additional \$25 billion or more to the cost of health care by 1980.)

A balanced budget and a better, more stable economy is a promise President Carter made, said Senator Eagleton, and it is one the public will remember.

Eagleton also criticized the idea of having the Social Security Administration administer national health insurance. He said the actuarial figures are already mind-boggling and if trends continue, benefits paid out by social security in 1990 could easily exceed the total amount made by all Americans in 1977.

It would be unwise, said Eagleton, to add more programs to a system which is already facing deficits.

If the Kennedy-Corman bill becomes a reality, he said, it will be because we have proven the present system cannot work for the poor and the elderly and because nothing was done to correct the grave "maldistribution" problem.

In all, representatives from AMA, the US Congress, state medical societies, county medical societies, newspapers, the British Health Service, universities, banks, the Department of Justice and the American Bar Association discussed and analyzed everything from national health insurance to the art of negotiating, from the concept of professionalism to continuing medical education, from risk management to the political scene.

The following special report on the British Health Service features the complete comments of two English physicians who appeared at the 5th Annual AMA National Leadership Conference. Each of them discusses the pros and cons of the BHS and offers insight into the practice of medicine in England.

Next month's *Journal* will feature the comments of a BHS administrator and those of Senator Herman Talmadge and AMA Delegate, James S. Todd, MD, New Jersey. □

British Health

Peter H. Lord, MD

The majority of the consultant surgeons work in District General Hospitals. In the High Wycombe District, which is situated thirty miles west of London, we have two District General Hospitals with a total of ninety surgical beds, staffed by three consultant surgeons, two registrars, two senior house officers, and five pre-registration house officers. We are responsible for all the general surgery, including urology, for a population of 250,000.

All our patients are first seen by a general practitioner who may arrange for an emergency admission (*eg* acute appendicitis), or for the patient to be seen in a surgical out patient clinic. If clinic referral is urgent, the patient is seen within a few days (*eg* lump in breast). If it is routine, there may be up to fourteen weeks' delay (*eg* varicose veins).

In the out patient clinic the patient may be investigated and returned to his general practitioner, or more usually, may need surgery, in which case admission is arranged, in Wycombe usually within one or two weeks. It is a lamentable fact that in some parts of the United Kingdom patients wait over a year for a non-urgent operation.

At no time is the patient asked to make any contribution to the cost of his treatment. All patients are treated in an equal manner, priority being given only to the surgical condition with which the patient presents. The patient can discuss with his general practitioner to which consultant he wishes to be referred, and the GP can refer him freely to any hospital in the country. There are no

geographical boundaries, but the patient is referred to that particular consultant's service and may not necessarily receive personal attention of the consultant. He must accept that he may be treated by an assistant.

All consultants are paid at the same rate regardless of specialty, work load, or responsibility, though there are increments related to seniority, and merit awards for those considered to have made a special contribution. A full-time consultant is paid \$18,385.08 per annum for a week of eleven sessions. He is not entitled to private practice. A part-time consultant is committed to nine sessions and is paid 9/11th of the same sum. He is expected to make up the difference from his private practice. (Doctor Lord said his average take home pay for performing one-third of the general surgeries on a population of 250,000 was about \$800 a month.)

A session has not been defined. Since most people in Britain work a 40-hour week, eleven sessions presumably equals 40 hours, and nine sessions 9/11ths of 40 hours, *ie* 33 hours per week. The contract, however, is open-ended. Clearly it is impossible for a surgeon with quite junior assistants to manage the surgery for one-third of 250,000 people on a 33 hour week. Many so-called part-timers average 40 hours in the hospital, plus 40 hours on stand-by.

To understand our Health Service, you must realize that in Britain we have gone a long way down the socialist road, and most of us, both outside the profession and within it, accept a degree of socialism which would be

(Continued on Page 58)

h Service

J. McLuskie, MD

As Doctor Johnson said, in about 1770, "There is nothing that concentrates a man's mind so much as the knowledge that he is to be hanged next day." Faced with such a distinguished audience I find myself in a somewhat similar position, and I have concentrated on the word 'pitfalls.' This might seem to imply criticism, but I have not come here to criticize the National Health Service, for it has many excellent qualities.

The basic principle is that every individual, of any description, can obtain the best treatment that the country can afford, entirely free at the moment of demand. On an individual basis this means that the doctor is free to prescribe whatever treatment is required without having to consider the patient's economic circumstances. These are entirely laudable aims.

Another equally desirable concept, though not so easy to achieve, is the ability to plan the total health service to give the best result from the resources available. In general practice this has led to the formation of the Primary Care Team out of what was very much a cottage industry.

I can best illustrate this by describing my own practice, which is entirely typical. In a country town of 70,000 inhabitants we have 10,500 patients. These patients are personally registered under the N.H.S. with the four doctors. They are 'our' patients, and we are responsible for their medical welfare literally from the cradle to the grave. This personal element adds considerable stability to a practice, and patients don't change their doctor very much, but it possibly removes a bit of the

competitive edge. My own practice is relatively new, being only in its fourth generation. Two brothers squatted in what was then a slum area in a measles epidemic in the early 1900's and did very well. I still have elderly patients who proudly announce that they can remember old Doctor Bannerman, and of course, knowing successive generations of one family is an invaluable background to the practice of medicine.

In addition to the four doctors there are three nurses (one of them male), a midwife (we do normal obstetrics in a G.P. maternity home), and four health visitors in addition to the usual reception and secretarial staff. We number 17 altogether. We own our premises which is a converted house on the main road. It has four consulting rooms, a treatment room, and the usual offices.

So you see that here we have a basis for a team of all those concerned with delivering health care to a community. And I would emphasize that we very much take this care into the patient's homes. The doctors spend about a third of their time on house calls, and the nurses and health visitors well over half. Health visitors have the full nursing and midwifery qualifications, with a special training in preventive work. Originally this was directed to child health, but their work is rapidly broadening to include more social problems of all age groups.

We work in very close association with the specialists in the hospitals, and all referrals to hospitals go through the general practitioner in the first place. In a year general practitioners do 200 million consultations, while

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*Peter Lord, MD
Consultant Surgeon
High Wycombe District
England*

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abhorrent to the majority of you. It is a great joy to carry out surgery in an efficient and effective manner and at no time have to worry whether the patient, or the hospital, or even the country, can afford what we do. We have been in this happy position since 1948.

Agreed, we are in difficulties now, though you would not think so if you visited Britain. We are going to tighten our belts until our trade unions learn that we can only enjoy what we earn, and we all learn to disbelieve the politician who offers the soft option.

"It is a lamentable fact that in some parts of the United Kingdom patients wait over a year for a non-urgent operation."

It was widely believed that a National Health Service would raise the standards in the medically deprived areas, and in some degree this has happened. Undoubtedly, many areas are much better off than they were in 1948, but it is interesting to speculate as to what would have happened to these areas in the absence of an N.H.S. It can be argued that many would have done a lot better for themselves if they had been more independent, if they had been allowed to spend

their own money rather than have it taken from them by the tax collector and reallocated by a bureaucracy. Few would disagree that our centres of excellence have suffered very badly from nationalisation, and their situation has deteriorated rapidly in the last year or two now that money is getting tight.

"... most of us, both outside the profession and within it, accept a degree of socialism which would be abhorrent to the majority of you."

There has been loss of mobility within the profession. Once a consultant has an appointment, it is difficult for him to move, and he cannot really choose where he would wish to practice. He has to apply for an advertised post which happens to fall vacant as he finishes his training. In spite of this, there are still considerable discrepancies in the hospital services in different parts of the country. The lesson here is that however inefficient market forces may be, there is little evidence that bureaucracy can do better.

To the outsider, it seems most unlikely that the United States would ever be landed with a Health Service similar to the British pattern, and it must be remembered that our Health Service was planned during the war, and was inaugurated shortly afterwards. Old men who had stayed on, retired in large numbers and young doctors coming back from the fighting had developed little in the way of vested interests and were amenable to change. The country was used to a degree of control and rationing, which would not normally be acceptable, and there was a general desire to build a brave new world after the devastation.

"Few would disagree that our centres of excellence have suffered very badly from nationalisation . . ."

To the clinician, like the surgeon, whose work is easily itemised, the ideal situation,

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specialists do 11 million out-patient consultations. The specialists work, of course, only starts with the out-patient consultation, but these figures give you some idea of the place of primary care in the medical scene.

"... every individual, of any description, can obtain the best treatment that the country can afford . . ."

All drugs are obtained by the patient entirely free of charge, except for a nominal prescription charge of 34c per item. Political considerations apart this is probably a mistake. Particularly with inflation there is a danger that the cost will escalate out of control, for the government cannot control this without infringing the doctors freedom to prescribe what he thinks fit. In fact, this is a cost over which the government has virtually no control beyond exhortation, and the doctors economical good sense. In my county the general medical services cost \$4,128,000 and the chemists and drugs cost \$5,831,000. There is surely something wrong here.

The doctors' pay structure is complicated, and I cannot go into details here, but it is based on a capitation fee of so much per patient registered, with an additional sum for the expense of running the practice. It is recognized that this method does not relate to the amount or quality of work done, and the system is loaded in various ways to counteract this. But it still does little to provide any direct financial incentive to good work. It is probably important to have a pay structure that does provide an incentive to good work.

"... the doctor is free to prescribe whatever treatment is required without having to consider the patient's economic circumstances."

The nurses and health visitors are attached to the practice, but are paid for entirely by the State. The State also refunds 70 percent of the salaries of the reception and secretarial staff.



*J. McLuskie, MD
District Management Team
High Wycombe District
England*

With regard to the premises, the State refunds the rates in full, and also the rent, or an equivalent sum if the premises are owned by the doctors.

The latter arrangements date from a dispute we had with the Government in 1966. At that time the pay structure was such that the doctor was penalised financially for providing good facilities and staff. This was an impossible situation. Morale and efficiency were falling, and with them recruitment of doctors. The Government did nothing. The British Medical Association collected 75 percent of undated resignations and said, "... if you don't do something we will put the date on them." You have never seen a government department move so fast. The fact that we are now subsidized for premises and staff means that we have got the basis for giving a good service, but please note that we had to drag it out of the Government, and this brings me to one of the pitfalls.

Keep it (the health care system) out of politics, or if you can't do that, keep it out of the hands of huge bureaucratic government departments. We all know that politicians and governments are as dedicated to producing a healthy nation as anyone else, but between the two they sometimes come to some odd decisions. Can I give you a very small and

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which we all enjoy when it happens, is to have a patient who is ill, who is made completely better, and who cheerfully pays a substantial fee which he can easily afford. Unfortunately, this idyllic system will only cope satisfactorily with one fairly limited aspect of medical practice. It does nothing for chronic disease, for the old, or for those whose treatments are complicated and expensive. This does not mean that it should be abandoned in those fields of medicine where the method is appropriate, and I am pleased to say that we have so far preserved this in Britain in the form of private practice, carried out by those consultants like myself who are part-time. From the British experience, what are the pitfalls to try to avoid, accepting that no system is ever going to be perfect, and that any system must be capable of change and be sensitive to change in requirements?

"There has been loss of mobility within the profession. Once a consultant has an appointment, it is difficult for him to move, and he cannot really choose where he would wish to practice."

Beware of bureaucracy. It is easy to look round and see ways in which the present facilities could be re-arranged and make them more efficient, but in the long term, eliminating competition results in stagnation. Beware of the master plan. Big is not beautiful. Britain is only a small country, but problems and situations are very different in one part as compared with another, yet they have to be solved within the same national framework. This can be very frustrating and wasteful.

Beware of standardisation. Some forms of standardisation, for example, all needles and syringes being interchangeable, are clearly advantageous, but quickly standardisation can reduce choice and limit experience.

Beware of preventive medicine. It sounds very attractive; it is very expensive, and you are still left with the sick patients to treat. Whenever possible, preserve the normal doctor/patient relationship with payment at

the time by the patient for services rendered, but accept that there are now many spheres of medicine where this is no longer appropriate. Reserve mobility of staff and independence of *all* institutions. In 1948 our teaching hospitals preserved a much greater degree of independence than did the rest. Twenty years later, they were so much a minority that they have now been swallowed up, while those previously nationalised were smiling behind their hands.

"Beware of bureaucracy."

Preserve the altruism and idealism that most young doctors bring into the profession; keep them from those who would teach them to be cynical and greedy.

Accept that it is the profession's responsibility to find the solutions to our problems, otherwise the politicians step in, as they have done in the United Kingdom, and it is often quite amazing how little they understand the true nature of the problems we would all like to see solved. □

Trustees Will Meet March 5th

James B. Eskridge, III, MD, Chairman of the OSMA Board of Trustees, has announced a called meeting of the Board for March 5th. The Board will hear reports from several of the association's council and committee chairmen, including an interim report from the Council on Planning and Development. The new council is responsible for coordinating activities of the association and for developing an annual plan of activity. This is the first year the association has operated under the new organizational structure established by the House of Delegates in April, 1976.

The board will also receive status reports from the association's insurance counselors. The OSMA Qualified Plan Service Co., a management firm specializing in physician pension plans, has completed 14 months of operation, and the 1977 malpractice insurance program will have completed its enrollment for the year. Trustees will be briefed on the contracts negotiated to provide Oklahoma doctors with coverage through January 1st, 1978. □

(Continued from Page 59)

parochial example. My District is desperately keen to open an Intensive Care Unit in the local hospital. It is sitting there fully equipped, but we have not got the money to pay for the staff. At the same time the District has been given additional money which must be spent on paying surgeons on an item for service basis for sterilisation operations. This is an entirely unsolicited political decision, quite unrelated to health needs, which, when balanced against an intensive care unit, just does not make sense. And yet we have to do it.

If we assume, as we must, that the politicians' priorities are laudible, does the fault lie in a failure of communication in an operation of this size. The Health Service spends \$77,400,000,000 a year, and employs just under a million people. The question must be asked whether government departments have the machinery for running such a huge organization in an efficient manner while remaining sensitive to the needs of the periphery.

"The doctors spend about a third of their time on house calls . . ."

My second pitfall relates to the doctors' independent status. Thanks to the insistence of our negotiators family doctors are still technically independent contractors. We are under contract to the Health Authority to provide a service. This means we have to look after our patients' health at all times, but we are free to provide this service in the manner we think fit, subject, of course, to certain broad and well recognised guidelines. We cannot be dictated to by the authorities provided that we are giving a proper service. This means that in our doctor-patient relationship our allegiance is to the patient and not to the state. We consider this to be of fundamental importance in the practice of family doctoring.

There is another extremely important factor here, and this relates to the independent ownership of practice premises. I regret to say that there are occasions when we are in dispute with our monopoly employer. Six times since the Health Service was started in 1911 we have had to resort to handing in our resignations. In effect we say that we will continue to treat our patients, but not under the N.H.S. They will have to pay the economic fee. This

action, which we deplore having to take, can only be effective if we control the premises from which we work.

In this connection I should mention health centres. These are purpose built premises provided by the government to house all members of the Primary Care Team. There are many advantages to such an arrangement, but for the reasons just stated we are wary of having a monopoly landlord as well as a monopoly employer.

"... there is a danger that the cost will escalate out of control . . ."

Here I must mention community hospitals. This is a new development in an entirely different category. In some areas G.P.s have always had small 'cottage hospitals' in which they look after their own patients. Current thought is to provide larger, say 75-bedded, hospitals, running in association with the general hospitals, where the general practitioner will have sole charge of patients who do not require elaborate specialist treatment. They will also take post-operative cases, and a considerable number of geriatrics. This is a development with which we are entirely in favour. With the advent of modern drugs, and the expansion of ancillary staff, there is a danger that general practice might fall between two stools. This is a direction in which we would very much like to go.

"In a year general practitioners do 200 million consultations, while specialists do 11 million outpatient consultations."

The last pitfall I would mention is the danger of providing such a service entirely free at the moment of demand. We are the only country to do this, and the absence of imitators cannot be flattering. There is a strong case for making the patient pay some form of token payment. Believe it or not, when the Health Service was introduced in 1948 it was thought that once the backlog of untreated illness had been dealt with, the cost of the Health Service

would actually fall. Nothing could be further from the truth. The provision of a 'free' service has proved to be an entirely open-ended commitment. There is no limit to the public's expectation of health care, and government has reluctantly come to recognise this. It is, of course, argued in some quarters that the imposition of a charge may prevent some from coming up with an early but serious symptom because they can't afford it. I find it hard to believe that in a relatively prosperous and socially protected society some token charge, related to what is spent on drink or tobacco, is really going to act as a deterrent. The B.M.A. is in fact reported to be about to make some such recommendation to the Royal Commission on the Health Service. The only charge we do have (apart from teeth and glasses) is a prescription charge on each item prescribed. This tends to go up and down like a yo-yo according to the political party in power, but we do not find that changes have any effect on demand after the first week.

"In my county the general medical services cost \$4,128,000 and the chemists and drugs cost \$5,831,000. There is surely something wrong here."

There is nothing like putting your hand in your pocket to make you appreciate the value of what you are getting. I am not saying that the Health Service is abused, but there is no doubt that a proportion of demands on it are trivial, and it is arguable that they absorb facilities that could be better used elsewhere.

During the holiday week following Christmas, attendance at my surgery was a half of what it would be in a normal week. One can't help wondering how ill the other half were.

"The British Medical Association collected 75% of undated resignations and said, '. . . if you don't do something we will put the date on them.'"

We all know that fibres that are not used atrophy. Can this be true of moral fibre as well? We have had 29 years of a free health service, and I get the impression that there are some who are less self-reliant in dealing with their trivial illnesses than they used to be. If this is true would not some contribution at the time of use encourage a little self-discipline that would be of benefit to the service as a whole?

"Keep it (the health care system) out of politics, or if you can't do that, keep it out of the hands of huge bureaucratic government departments."

You may feel that I should not repeat Oscar Wilde's advice to the young man about to get married, and say "Don't." But No. There are many good things about the National Health Service, and there could be more if the country could afford them. I would only say in caution . . . keep it out of huge bureaucratic government departments. Keep your independent status, and make the patient make some contribution at the time of demand. □

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Medical Records Gain Congressional Attention

Congress is showing increased interest in the problems of maintaining confidentiality of medical records in the age of computers and vast federal medical programs. The House Commerce Subcommittee on Oversight and Investigations is considering hearings on the issue next year.

The most serious evidence of abuse so far came with state grand jury indictments in Denver, Colorado, of an investigative company—Factual Service Bureau, Inc.—on charges of selling confidential records to large insurance firms. Factual was alleged to have had agents who were able to penetrate the records of the Federal Bureau of Investigation and the Internal Revenue Service, among others. Twenty defendants, including three insurance companies, have been indicted so far in the investigation launched by Colorado District Attorney Dale Tooley, who claims the evidence so

far "is really the tip of a nationwide iceberg." Federal agencies are also pursuing the case.

The House Oversight Subcommittee, headed by Rep. John Moss (D-Calif.), is carrying on a running dispute with the Social Security Administration over the privacy of medical records in the Medicare program. "We believe very serious questions remain about privacy of records concerning individuals in custody of the Social Security Administration, especially in light of future plans," said Moss in a letter to Social Security Chief James Cardwell.

Social Security operates three data transmission systems which link private Medicare intermediaries with the Social Security Health Insurance Data Bank. The two less sophisticated computer systems, the Advanced Record System (ARS) used by private Medicare intermediaries in 16 locations, and the Programmable Magnetic Tape Terminals (PMTT) used by Blue Cross, Blue Shield, and all but two other private intermediaries, use record retrieval systems "which cannot be abused by any employee of a private contractor either in an authorized or unauthorized manner," said Moss. □

AMA REVENUES AND EXPENSES

	PROJECTED 1976	ACTUAL 1975
REVENUE:		
MEMBERSHIP DUES EARNED	\$36,222,000	\$17,802,000
ADVERTISING	9,000,000	8,211,000
SUBSCRIPTIONS EARNED	2,370,000	3,319,000
GRANTS, CONTRACTS, EDUCATIONAL PROGRAMS	2,288,000	2,900,000
ROYALTIES	2,293,000	2,184,000
BOOKS AND PAMPHLET SALES	564,000	723,000
OTHER	2,878,000	2,063,000
TOTAL REVENUE	\$55,615,000	\$37,202,000
EXPENSES:		
SALARIES AND WAGES	\$13,982,000	\$12,612,000
EMPLOYEE BENEFITS	2,566,000	2,331,000
TRAVEL AND MEETING COSTS	3,774,000	2,991,000
MEMBERSHIP AND HONORARIA	1,091,000	1,089,000
PUBLICATION EXPENSES	10,160,000	10,703,000
SPECIAL COMMUNICATIONS PROGRAMS	89,000	158,000
PROFESSIONAL FEES	1,636,000	1,882,000
OCCUPANCY EXPENSES	1,593,000	1,543,000
OPERATING EXPENSES	3,522,000	3,135,000
FINANCIAL EXPENSES	955,000	904,000
CONTINGENCY FUND	732,000	
TOTAL EXPENSES	\$40,100,000	\$37,348,000

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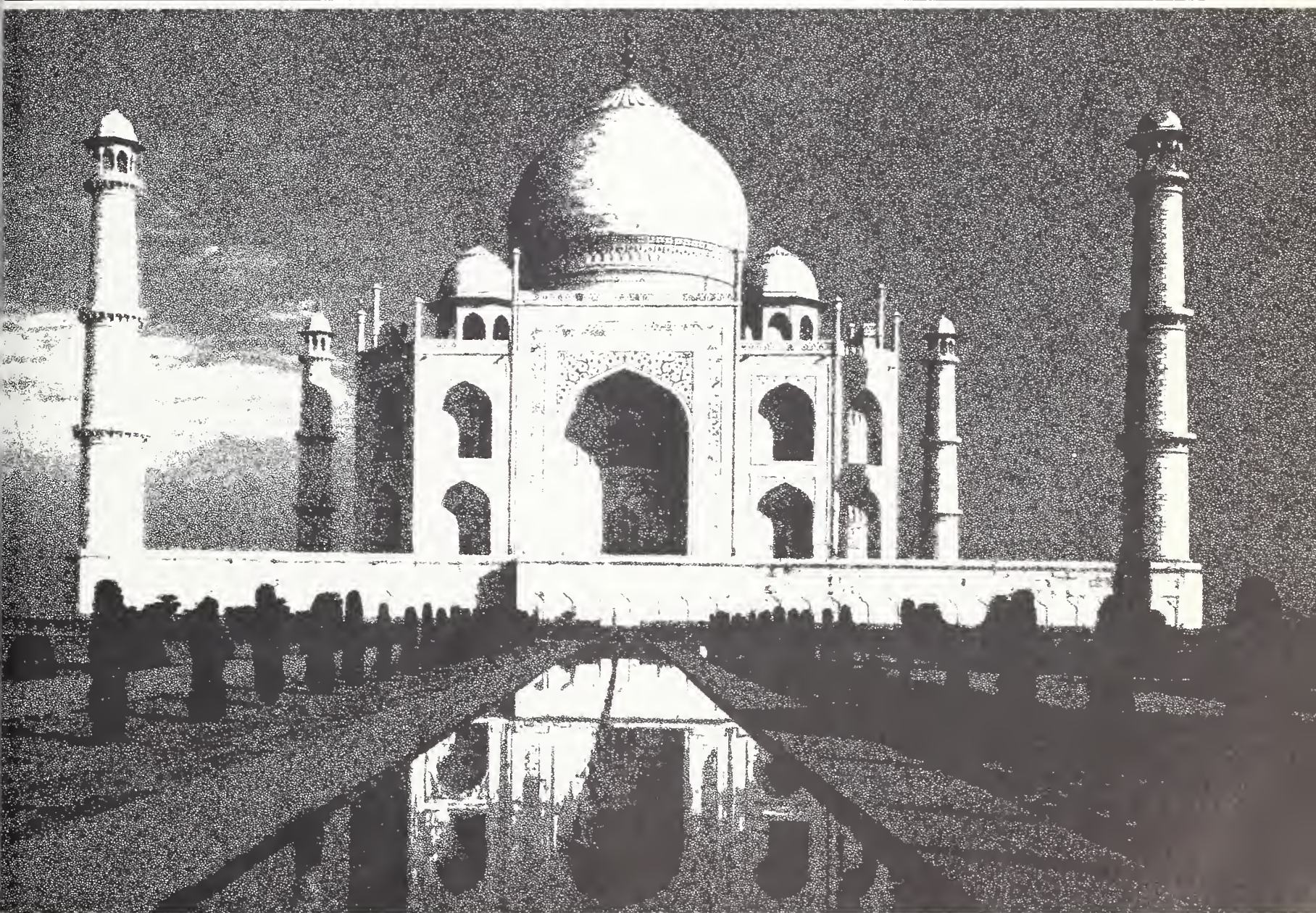
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OURS Plan Operational

After 18 months of planning, the Oklahoma Utilization Review System (OURS) became operational February 1st. The plan replaces all Medicare and Medicaid Utilization Review Requirements for hospitals in the state of Oklahoma.

The OURS project grew out of an attempt by Oklahoma's physicians to assist the state's smaller hospitals. On November 29th, 1974, the Secretary of HEW published a series of new utilization review regulations that were to be implemented in early 1975. Nearly 50 hospitals were identified as being unable to comply with the regulations because of personnel limitations.

The new regulations came under immediate attack from physicians and medical associations throughout the United States and under legal attack by the American Medical Association. In mid-summer, 1975, a federal district judge enjoined portions of the regulations and instructed HEW not to seek their enforcement. However, the vast majority of the regulations were left in place and were enforceable.

During the early months of 1975 a task force of medical organizations was established to help Oklahoma's hospitals comply with the new regulations. A task force was made up of the medical association, osteopathic association, hospital association, nursing home association, the department of public welfare, the state health department, Aetna-Medicare (physician payments), and Blue Cross-Medicare (hospital payments).

A task force originally attempted to help Oklahoma's hospitals comply with the regulations as they were published. However, by May of 1975 it was obvious that many Oklahoma hospitals would never be able to meet the regulation requirements. An attempt was then made to formulate an alternative utilization review plan for Oklahoma.

Throughout the summer discussions were held with various federal officials regarding the feasibility of such a plan. After receiving encouragement, by early August a tentative plan had been completed and approved by the state medical and state osteopathic associations. Termed a "Cost Effectiveness Program," the alternative was designed to emphasize retrospective audit to identify hospi-

tals and physicians who might be deviating from acceptable professional standards of practice. This was in direct contrast to the HEW regulations that emphasized case by case concurrent review of all Medicare and Medicaid admissions.

After several meetings throughout the fall of 1975, all of the technical difficulties with the plan were worked out by members of the task force working in conjunction with HEW representatives from Washington. On December 21st, 1975, during the joint meeting of the state's four largest health care professional organizations the entire plan was approved as a statewide demonstration project on utilization review. Organizations represented and voting affirmatively for the program included the Oklahoma State Medical Association, the Oklahoma Osteopathic Association, the Oklahoma Hospital Association, and the Oklahoma Foundation for Peer Review.

The 12-month demonstration project, was to be fully funded by HEW, and then conducted by the Oklahoma Foundation for Peer Review.

The concept that was agreed to in December became the basis for the formal plan that was developed during 1976. Nicknamed "OURS," the plan was a description of the utilization review project designed to establish an objective and reliable retrospective audit system for hospital utilization review. It would selectively reward institutions which met certain standards by waiving or relaxing the utilization review requirements to be met. A hospital that failed to meet the performance standards would be held to more stringent review requirements.

A computer screening system was developed to evaluate every hospital based on 14 different measurements of the hospital's performance. The measurement statistics were to be taken directly from the Medicare and Medicaid claim forms.

All hospitals will be reevaluated quarterly. The evaluation will be carried out by a regional review team consisting of nine physicians, a proportionate number of MD's to DO's, utilizing the computer screening mechanism along with subjective judgment.

In late November of 1976 the foundation was informed that the Oklahoma Utilization Review System had been fully approved by all of the necessary offices in HEW. A contract to implement the project was finalized

between the foundation and the department of public welfare.

Preliminary funding of \$15,000 was received in December so that the project could begin operation. Two manuals were published in preparation for the February 1st deadline. The first was an *OURS Project Operations Manual*, and the second was an updated republication of the foundation's *Hospital Admissions Criteria and Length of Stay Data*.

A series of six regional seminars were set up for mid-January, 1977, to familiarize all appropriate hospital personnel with the operations of the OURS plan. The seminars were held in Enid, Tulsa, Lawton, Oklahoma City, and at Arrowhead Lodge on Lake Eufaula. Only one hospital in the entire state failed to send a delegation to one of the training seminars.

The hospital evaluation portion of the OURS Plan actually began on January 23rd. On that date all Oklahoma hospitals were invited to send delegates to a meeting in Oklahoma City. At that time the hospitals were given their initial evaluation by their regional review teams. In addition, the teams made recommendations to various hospitals as to how they might improve their performance statistics.

The initial evaluations were made on data that was collected between July 1st and December 31st, 1976. During that six-month period all Medicare and Medicaid claims were recorded in the OURS computer facility and then utilized to make the 14 measurements for each hospital.

All hospitals in the state had been advised prior to the January 23rd meeting that they would be either waived or conditionally waived during the first quarter of the plan. The foundation's board of directors felt that it would be unfair to place any hospital in a non-waived category . . . one requiring very stringent utilization review inside the hospital . . . since the hospitals had never been evaluated before. The first three months of the project gives all hospitals an opportunity to bring their performance statistics within acceptable range or to explain why their statistics are unusual.

HEW published a special regulation in the January 5th issue of the *Federal Register* allowing Oklahoma hospitals to participate in the OURS Plan and, by choosing to do so, being freed of all other utilization review requirements. On January 18th official word

was received from HEW that the OURS plan was fully approved and that its entire funding of \$194,000 was released for use by the foundation.

Because the plan is being operated by the Oklahoma Foundation for Peer Review, there is a possibility that it might conflict with the Professional Standards Review Organization planning for Oklahoma. The foundation is the PSRO planning agency for the state in addition to being the OURS contractor.

The foundation's contract with HEW specifies that it shall perfect a PSRO plan for Oklahoma and have it ready for operation no later than September 30th, 1977. However, the OURS project is designated to run for 12 months beginning February 1st, and subsequently would not be completed until January 31st, 1978.

It has always been the stated intention of the foundation to utilize the data and experience that it gains under the operation of the OURS plan to formulate its PSRO plan. Originally, it was intended that the two plans would run concurrently. Unfortunately, delays were encountered in the implementation of OURS, and the two plans got further out of synchronization.

In order to alleviate the possibility that there would be a conflict between the two plans during the summer and fall of 1977, the foundation has informed the Secretary of HEW that it does not intend to complete its PSRO plan and seek designation as an operational PSRO until the OURS plan is completed in early 1978.

The foundation's letter to HEW Secretary David Matthew stated, "During the formative period of the OURS plan the foundation expressed its intention to utilize the data and systems developed for OURS as the basis for its PSRO plan for Oklahoma. This view was repeatedly expressed to HEW personnel, to the other sponsoring organizations (of the OURS plan) and to the physicians of Oklahoma." The letter went on to say, "the foundation wishes to restate its intention . . ." to use the OURS plan as the basis for its final PSRO plan.

During the 12 months the OURS plan will be operational, the hospital Medicare certifying agency for Oklahoma, the Hospital Licensing Section of the Oklahoma State Health Department, has been notified that it will not make on site surveys of hospitals for "utilization review purposes." The agency has

also been notified by Welfare Director L. E. Rader that the OURS plan meets all utilization review requirements for Medicaid purposes.

As soon as the OURS plan was initially funded, a registered nurse with a background in utilization review, medical records administration, and medical care evaluation studies was employed by the foundation. Mary Lois Grantham, RN, assumed the duties of the OURS plan in mid-December. Her position was that of Review Coordinator Advisor. She will assist hospitals in complying with the OURS plan by working with medical records personnel, utilization review coordinators, and business office personnel.

Any physician wishing additional information about the OURS plan, or any hospital wishing assistance should contact the Oklahoma Foundation for Peer Review, 840-2891.

FTC Continues Attack On Professionalism

Claiming that it should never have been issued in the first place, the American Medical Association has asked the Federal Trade Commission to reconsider the restraint of trade complaint it filed in late 1975 against the AMA and a state and county medical society. The complaint claims that the AMA Code of Ethics regarding advertising by physicians prevents competition and therefore is in violation of antitrust laws.

In a recent brief the AMA said that the FTC had issued its original complaint without fully understanding or being aware of the AMA's recent actions on physician advertising and the participation of physicians in medical group operations. As a result, says the AMA brief, "The AMA has been forced to engage in protracted and financially debilitating litigation to defend statements that do not even reflect its own current policy. Surely, there must be a better way. In sum, fairness, common sense, and economy all suggest that the commission reconsider issuance of the complaint."

The AMA brief also claims that the FTC action against medicine is the first time in its history in which it has attempted to assert jurisdiction over a non-profit professional association "with a 130-year history of serving the public." It also states this is the first at-

tempt by the FTC to regulate the ethical standards of professionals. And yet, says the brief, "the case was instituted without prior investigation of the facts and without any prior discussion with respondents."

Revised AMA policy permits advertising but bans solicitation of patients and the use of misleading testimonials. Unlike the federal government, however, the AMA policy is superceded by state and county policy if it differs.

In announcing the brief, AMA Executive Vice-President James H. Sammons, MD, said if a proper investigation had been conducted, the FTC complaint would never have been filed. He said, "While the AMA recognizes a legitimate role for advertising, we absolutely and steadfastly reject improper solicitation of patients." Sammons said solicitation is hucksterism and hucksterism has no place in medicine.

The FTC complaint was issued against the AMA, the Connecticut State Medical Society and the New Haven County Medical Association. The case has been assigned to an FTC administrative judge, but no hearings have been held.

The AMA brief also pointed out that the AMA is currently reviewing its position on physician participation in group medical plans. In 1974, the AMA adopted a policy stating it was not ethical for a physician to provide medical services to members of a prepaid medical care plan or a health maintenance organization.

The AMA said that the issues raised in the FTC complaint had already been reviewed and changed at the time of the complaint or were in the process of being reviewed. Therefore, it said, the FTC should at least defer its proceedings.

FTC Also Hits Dentists

While the AMA was asking the FTC to reconsider the action it had filed against the physician Code of Ethics, the FTC was forging ahead with similar action against the American Dental Association. Again the move apparently is an FTC attempt to wipe out all professional restrictions on advertising.

The recent FTC complaint charges that the ADA's Code of Ethics "fixes prices or otherwise interferes with the prices of dentists' services, keeps patients from knowing which dentists might be cheaper," and "restrains the development of innovative systems for the delivery of dental services." □

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Doctor Brown Receives OSMA Life Membership

Doctor Walter E. Brown (right) receives his Life Membership Plaque from Doctor Orange M. Welborn, OSMA President. The presentation was made at a recent meeting of the Medical Advisory Committee to the Department of Institutional, Social and Rehabilitative Services, of which Doctor Brown is chairman. Doctor Brown set up his practice in radiology in Tulsa in 1945 and he has served organized medicine in many capacities, including President of the Oklahoma State Medical Association in 1960-61

AMA Enters Litigation on Professional Advertising

Unrestricted advertising of prices or fees in newspapers by attorneys or physicians is not in the best interest of their clients or patients, declares a brief filed this month with the US Supreme Court by the American Medical Association.

The AMA brief is filed as a friend of the court in a case appealed from the Supreme Court of Arizona in which two attorneys are seeking to overturn the proscription of the Arizona State Supreme Court against unrestricted advertising of fees by attorneys in the state.

Advertising in the highly sophisticated field of medicine raises considerations quite different from the advertising of consumer products and simple services, the AMA points out.

There is significant potential that some apparently truthful claims will mislead the ordinary consumer to his economic and physical detriment. There also is risk that some non-deceptive statement can cause the quality of service rendered by physicians to deteriorate. For instance, the physician may fail to order necessary lab tests and x-rays because the cost would exceed his advertised fee for a given service.

Although the Arizona case involves attorneys, the same considerations would apply in medicine, the AMA points out.

The brief points out that the AMA does not proscribe all advertising by physicians. The ban is against solicitation of patients through use of testimonials, claims of expected results of treatment, claims that imply superior skills to other physicians, or claims that contain incorrect or incomplete facts.

Medical Bills at Legislature

Since the 36th Legislature convened on January 4th, the OSMA Legislative Committee has been looking over a number of House and Senate bills that would affect medicine. Below is an abbreviated list of those bills.

H.B. 1022—Rape Victim Treatment Act. This bill, authored by Representative Charles Cleveland (D-Tulsa) will mandate all hospitals and licensed medical doctors to perform necessary rape examinations for legal prosecution. The OSMA Legislative Committee recommended several changes in this bill, but indicated it is imperative that the associa-

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tion support good legislation for rape. This bill has passed in the House and is now to be considered in the Senate.

H.B. 1260—Chiropractic Bill. This bill, authored by Representative Kenneth Nance (D-Oklahoma City) will be considered in the House Committee on Governmental Reform. This bill will amend Oklahoma Statute 36-1971 to allow exclusive discretion of a *practitioner* in the method of treating illnesses or conditions of persons covered by insurance and will mandate equal compensation to any practitioner. There is little doubt that this bill will create heated debate from insurance carriers, as well as the OSMA and the Oklahoma Osteopathic Association.

Workmen's Compensation. A great deal of time and effort is being spent this legislative session on several attempts to reform the current workmen's compensation law. The two main pieces of legislation are sponsored by Governor Boren and by Representative Glenn Floyd (D-Norman). Governor Boren's bill would establish a medical panel, a concept which has received support

from the OSMA. Representative Floyd's bill, for the most part, does not affect the medical portion of the existing law. The OSMA Legislative Committee has suggested supporting any good reform of the current law, but has elected not to support any particular bill.

In an effort to make the current malpractice law more comprehensive, OSMA Legislative Committee will also introduce three pieces of legislation dealing with: collateral sources; warrantees and guarantees; and counter-claims. □

Surgical Congress To Meet

The 29th annual meeting of the Southwestern Surgical Congress will be held April 25th-28th, 1977, at the Princess Hotel in Acapulco, Mexico. For additional information contact Jack A. Barney, MD, Secretary-Treasurer, Southwest Surgical Congress, 708 Physicians and Surgeons Building, Oklahoma City, Oklahoma 73103, (405) 232-9735. □



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Medical School Enrollment Shows Another Increase

Total enrollment in the 114 US medical schools in 1975-76 was 56,244, an increase of 2,170 over the previous year, says the American Medical Association's 76th annual report on medical education. The report was published in the December 27th issue of the *Journal of the American Medical Association*.

First-year enrollment increased from 14,963 in 1974-75 to 15,351 in 1975-76, the AMA reports. The number of graduates increased from 12,714 to 13,561.

The total number of women enrolled in 1975-76 was 11,527, an increase of 1,741 over the previous year.

There were 39,330 full-time faculty mem-

bers in the schools in 1975-76, for a ratio of 1 teacher for each 1.4 students. In addition, more than 70,000 physicians and others taught part time.

The total new enrollment of 15,351 students was selected from a total of 42,303 applicants. For the first time in many years, the number of applicants declined slightly, from the peak of 42,624 in 1974-75. Each applicant applied to an average of almost nine different schools at the same time, hoping for acceptance by at least one.

By 1980, the 114 medical schools projected a first-year class of more than 16,000, with 15,500 graduates each year, and some additional medical schools will be in operation by that time.

Ethnic minorities enrolled in medical schools in 1975-76 totalled 4,595, a percentage of 8.2 per cent. □

DEATHS

F. REDDING HOOD, MD 1900-1977

F. Redding Hood, MD, 76, a noted Oklahoma City cardiologist, died January 8th, 1977, in Oklahoma City. A native of Delhi, Oklahoma, Doctor Hood was graduated from the University of Oklahoma College of Medicine in 1930, where he later served as an Associate Professor of both pharmacy and medicine.

Doctor Hood participated widely in both medical and civic organizations. For 18 years he served as medical director of the Selective Service System and for 15 years he was chairman of the Oklahoma City-County Board of Health. He was a past-president of the Oklahoma County Medical Society, the Oklahoma City Clinical Society and the Oklahoma Heart Association. He had served as a member of the Board of Directors of the American Heart Association. In addition, he was an organizer of the Oklahoma County Health Council, a founder of the Oklahoma City Internists Society and a

charter member of the Oklahoma Medical Research Foundation.

In 1973, the Oklahoma State Medical Association honored Doctor Hood with the presentation of a Life Membership in recognition of the outstanding service he had rendered to humanity and the medical profession.

AUBREY E. STOWERS, MD 1913-1977

A Sentinel, Oklahoma, physician for nearly 20 years, Aubrey E. Stowers, MD, died January 3rd, 1977 in Cordell. Doctor Stowers, 63, a native of Lone Wolf, Oklahoma, was graduated from the University of Tennessee College of Medicine in 1939 and the following year established his practice in Sentinel. In 1969 he joined the staff of Western State Hospital in Fort Supply where he remained until moving to Cordell about four years ago. Doctor Stowers was a charter member of the Oklahoma Chapter of the American Academy of Family Physicians. □

Dr. Schneider's salary of \$8,000 per annum is being supplied from the National Institute of Mental Health Budget.

Sincerely,
Stewart Wolf, MD,
Professor and Head of
The Department of Medicine"

In recalling the past it is part of our nature to remember the good times and forget the bad. It is easy for me to remember skating on a moonlight night over a frozen Minnesota lake with the only sound the swish of the skates and forget shovelling the driveway on a dark morning with the actual temperature at -32 and the windchill -70.

There were bad times too—difficult times. But through it all Bob maintained his unique approach.

He was the quintessential teacher.

He was the Mr. Chips of Medicine—in an age when those particular values are difficult to maintain.

He could forget the problems and make learning and teaching fun.

He was his best in teaching one student or a small group with the only teaching aids a patient, a microscope, a blackboard and a piece of chalk—in an age when emphasis was on audiovisual aids, computers, television and large classes.

He was a leader—in an age that asked for managers.

He was a friend of students—in an age where students commonly assume the adversary position.

He was a scholar—in an age that put emphasis in increasing the numbers of medical school graduates without concern for quality.

Is there a lesson in all of this? To me there is. The particular values he represented need to be preserved and fostered in all medical schools—to be fostered in *this* school. The faculty and the leadership (I use that term rather than administration) need to rise above the administrative snarls that entangle us, the budgetary worries that limit us, and the personal concerns that hamper us. We need each day, or a portion of each day, to forget about shovelling snow and remember the good things. The students need to get out of the adversary position. Then we can all have fun teaching and learning.

In closing I would like to share some familiar words with you that were written by the Dean of St. Paul's Cathedral (the one in London), in the 17th Century. I refer to John Donne. He wrote in his "Devotions,"

No man is an island, entire of itself; every man is a piece of the continent, a part of the main; if a clod be washed away by the sea, Europe is the less, as well as if a promontory were, as well as if a manor of thy friends or of thine own were; any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls; it tolls for thee.

Goodby Bob.

1. Robert M. Bird, James F. Hammarsten, Richard A. Marshall and R. R. Robinson. "A Family Reunion: A Study of Hereditary Hemorrhagic Telangiectasis. *New England Journal of Medicine* 257: (3):105-109 (July 18) 1957.

2. Robert M. Bird and (by invitation Richard A. Marshall) Unusual Hematological Manifestations in Disseminated Histoplasmosis. *Transactions of the American Clinical and Climatological Association*, Vol. 79:177-192, 1967.

BOOK REVIEWS

CLINICAL MANAGEMENT OF CANCER IN CHILDREN. Carl Pochedly. 265 pp. Acton, Massachusetts. Publishing Science Group, 1975.

This book contains fifteen essays on different topics relating to neoplastic disease in children. Several have been published previously and there is no true attempt at integration. Some of the topics deal with rather uncommon entities such as Burkitt's lymphoma, hypogammaglobulinemic reticuloendotheliosis, and familial hemophagocytic reticulosis. The subjects cover a wide spectrum of pediatric oncology and most of the chapters are understandable and well-written, although rather superficial in many instances. It is an introduction to the topic and not a definitive text.
Harris D. Riley, Jr., MD

MANUAL OF PEDIATRIC THERAPEUTICS. Edited by John W. Graef and Thomas E. Cone, Jr. 491 pp. Boston: Little, Brown and Co., 1974. \$8.95.

This book is designed to be "the pocket house officer," a source of specific information necessary immediately in dealing with the child who is seriously ill in the hospital as well as those seen in outpatient clinics and office settings. In general, this aim is achieved and there is a wealth of data well presented. Particularly useful are the tables on poisonings and those on therapeutic diets. The cross references are given with chapter and section rather than page numbers which is not particularly convenient. There tends to be rather extensive discussion of certain rare disorders such as pneumocystis carinii infection, but very little on common viral exanthems. In places, definition of terms is lacking (*eg*, Liley zones).
Harris D. Riley, Jr., MD

THE LIVES OF A CELL: NOTES OF A BIOLOGY WATCHER. Lewis Thomas. 153 pp. New York: Viking Press, 1974. \$6.95. Paperback, Bantam Books, Inc. \$1.75.

This is a fascinating book written by Lewis Thomas, MD, President of the Memorial Sloan Kettering Cancer Center in New York. It is a compilation of some 29 essays which has an underlying theme that all life is interrelated, that divisions in biology are merely illusory, and that so much in biology still can be better communicated in the language of poetry than

in mathematically precise language. The titles to various chapters will give a taste of the topics covered: "On Societies as Organisms," "The Music of This Sphere," "The Technology of Medicine," "Your Very Good Health," "Social Talk," "Living Language." Thomas is an excellent writer and all biologists will find this book interesting. *Harris D. Riley, Jr., MD*

TO EACH HIS FARTHEST STAR. Edited by John Romano, *et al.* 566 pp. with illustrations. Paper. Rochester, New York: The University of Rochester Medical Center, 1975.

This book of essays prepared by a committee under the chairmanship of John Romano commemorates the fiftieth anniversary of the University of Rochester Medical Center, founded in 1925. It is, in effect, a dedicatory effort honoring the anniversary and dedicated to George H. Whipple, the founding dean who died February 1, 1976 at the age of 98.

After an excellent introduction by Wallace O. Finn, which is a transcription of the address he gave at the time of the dedication of the Whipple Auditorium in 1950, the book is divided into some nine sections. The essays were prepared by 36 authors including presidents of the university, deans, faculty members of the medical and nursing schools, students, community leaders, and "an outside view" by Robert S. Morison. For a non-Rochester graduate, the section entitled "The Early Years" is probably of greatest interest because it offers an excellent review of the medical educational setting of the time and the efforts of Abraham Flexner and George Eastman which led to the founding of the school.

All persons interested in medical education will find this book most interesting. *Harris D. Riley, Jr., MD*

GASTROINTESTINAL RADIOLOGY IN PEDIATRICS. Edmund A. Franken, Jr. 337 pp. 574 illustrations. Hagerstown, Maryland: Harper and Row Publishers, Inc., 1975. \$27.50.

This book stems from the experience of the author, a pediatric radiologist at the James Whitcomb Riley Hospital for Children at the University of Indiana Medical Center. The volume is not intended to be encyclopedic. It is organized in an anatomic format. Basic anatomy, gross and radiological, is touched on only briefly and pathophysiologic features give place to the description of techniques for ex-

amination, listing of conditions in which the diagnostic roentgenographic features are found, and illustrations of examples. However, references at the end of each chapter indicate where further details can be found. The volume is recommended as useful for the radiologist whom the author intends to reach and will be a helpful reference text in hospital libraries. *Harris D. Riley, Jr., MD*

ATHEROGENESIS: INITIATING FACTORS. Ciba Foundation Symposium 12. 288 pp. North Holland, Amsterdam, London, and New York: Elsevier-Excerpta Medica, 1973-VIII.

This symposium on mechanisms in the development of early atherosclerosis was held at the Ciba Foundation in London July 5-6, 1972. Only three of the 22 participants are from the United States. Eleven are from the United Kingdom, three from Europe, and five from other countries. The objective was to bring together biochemists, physiologists, physicists, and clinicians to consider factors that result in the development of the early atheromatous plaque. The body of the proceedings consists of ten scientific presentations together with relevant discussions. It begins with the morphology of it followed by the chemical-morphological relationship of lipids in the human intima. J. M. Bailey of Washington, DC, discusses the regulation of cell cholesterol content. This is followed by highly technical papers related to the uptake, excretion, and biosynthesis of cholesterol, the response of the arterial wall to mechanical stresses exerted on the vessel lining by the adjacent blood flow, the topography of human atheromatous lesions, the uptake and transport of various classes of lipoproteins and other topics, primarily those of a biochemical nature.

The papers making up the symposium are limited in scope and are in a quite specialized area of atherosclerosis research. The book will be of interest primarily to those involved in investigation of atherosclerosis. *Harris D. Riley, Jr., MD* ☐

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HOW'S THAT AGAIN?

"Excuse me, Senator, but I'd like to ask you about the proposed ceiling on hospital costs."

"What's that? Hospital costs? Yes sir, we've got to do something. Why, it costs a fortune — I mean literally a *fortune* — to spend a few days in the hospital now. Even rich men can't afford to be sick now days. Why, one of my constituents told me that one of his friends . . . I'm sorry young man, I didn't catch your name — you from the press? What's your hometown?"

"No, sir. I'm not from the press. I'm from your hometown and I am Doctor . . ."

"Oh — a doctor! With the AMA boys — right? Well, you can tell them we're going to work closely with them — shoulder-to-shoulder — in their efforts to stem the tide of socialism, ride herd on those wild men in HEW and . . ."

"Senator, I'm afraid you didn't understand. I'm not from the AMA. I live and practice medicine in your hometown. My name is Doctor . . ."

"Wonderful. I think it's marvelous that you doctors will take time out of your busy lives to come to Washington and help us keep things in line. You know I wanted to be a doctor when I was a young man. Would have been, too, if my daddy's luck hadn't run out in '29. Greatest profession there is. Went to law school after the crash. It was closer to home and a lot less expensive. So I had to settle for second best. Only time in my life I ever did, though. Don't like to admit defeat. How long you been practicing medicine Doctor . . . what's that name again? Right there in my hometown eh? You related to old Doc Harlow — his nephew?"

"No sir, Senator. I don't know Doctor Harlow. My name is . . ."

"Well, of course you don't. Old Doc Harlow prob'ly died before you were born. I'm glad to see some younger doctors back home. Need more of them like yourself; up-to-date, enthusiastic, vigorous. Maybe if we get more of you around, we can get you to make house calls again. What can I do for you, doctor? Would you like to watch your congress in action this afternoon? Be glad to have Miss Rainey show you around the chambers."

"No, thanks, Senator. I wanted to ask you how congress is going to be able to limit the increase in hospital costs to not more than nine percent a year. If their costs go up — social security, minimum wage, liability insurance

premiums, gas and electricity bills, well, it just seems to me that . . ."

"You see, doctor, our tasks are never simple. Now you've put your finger on the very essence of the problem. It's not going to be easy, but we'll work it out. Got a lot of good minds — really good minds here in Washington and if we all work together we can find a way to control those runaway hospital costs. We'd been hoping the hospitals themselves would find ways to economize. But it looks like they're just not getting the job done. They need help and so do the sick folks back home. So, we're going to help them. We're going to get the job done, doctor. And of course, we are grateful for your support."

"But Senator — if health insurance reimbursements continue to be reduced and the costs of operating and staffing a hospital keep going up, the hospitals will be forced to curtail their services to their patients as well as their communities. They'll have no choice. Some of them will be forced to shut down altogether."

"Well doctor, if they can't find some way to economize and increase their efficiency, maybe they should shut down. After all, we all face the same problems; inflation, inefficiency, fancy offices and fancier equipment. Mark my word, doctor, if the hospital people can't manage with a nine-percent-per-year increase in costs, we'll show them how it's done. That's what we're here for. We've done it before. Lots of times."

"I suppose, Senator, you're telling me that you've failed only once in your efforts to control runaway costs by reducing inefficiency and eliminating fancy offices and fancier equipment and all that."

"How's that? Did I say we failed? When was that, doctor?"

"When you just recently raised your own salaries some twenty-seven percent. And aren't you soon to be awarded another raise — of close to nine percent — so that you can keep up with the costs of living, Senator? Or have I been misinformed?"

"Well, perhaps you don't have all the facts, Doctor . . . what's that name again — Harlow?" MRJ

While searching through some old medical artifacts recently, I came across a newspaper advertisement dating back to the early 1900's. As unusual as the ad was, it brought some very interesting comparisons to mind.



The author of the article claimed to be a doctor of the healing arts, but his message to the people claimed much more. It was blatantly untrue and the author obviously suffered from delusions of grandeur. Yet, in many ways, the message was reminiscent of today. The so-called doctor claimed a cure for every malady from malaria to piles and from cancer to the common cold. In effect, he was telling his potential patients, "If you have an illness, I have the cure."

Without being overly critical of well-meaning health planners and other do-gooders, I cannot help thinking that they suffer from the same problems as our so-called doctor. They have unrealistic expectations for themselves and their chosen trades, and as a result, they suffer from the same delusions. Without claiming to be able to relieve all pain and suffering, they seem to take the approach that all things are possible through planning. By doing so, they usurp the patient's responsibility for his health, the doctor's responsibility for health care and they distort a system of delivering care which has benefitted from more than 200 years of evolutionary-planning.

For example, today neither the doctor nor the patient is ultimately responsible for health care and health planning. A group of government call-letters and acronyms have assumed

those responsibilities and the future of medicine is now being largely determined by a small group of "elected officials" and scores of their lieutenants. There are HEWs, FTCs, PSROs, URs, HSAs, Title 18s, Title 19s, Senate Committees, House Committees, bureaus, departments, agencies, boards, areas, and sub-areas, all of which have something to say about the future of medicine. Medicine is on the line for its ethics and its lack of ethics. Medical societies are criticized for accepting advertising in their medical journals; doctors are criticized for not advertising. Legislatures have ruled that generic drug substitution is in the best interest of the patient. The federal bureaucracy has ruled that saccharin is not in the best interest of the consumer. Meanwhile, our legislators may soon decide that laetrile is in someone's best interest, even though no one knows if it causes cancer, cures it or does anything at all. There are right to life bills and right to death bills and rules for everything in between.

What we don't have is medicine by the doctor and for the patient and that is what we need!

At this point government has nearly legislated the doctor out of the delivery of health care. Forms of one sort or another dominate our practices and the quality of medical care is determined by national standards and computer print-outs. Health planners have not yet realized that charts and graphs do not relate to the patient. For him it is always all or nothing.

Medicine took voluntary action years ago to curb unethical advertising and to end the hucksterism that was common then. It is now time for health planners to do the same.

A decade of intensive planning has served only to inundate us with unreasonable rules and regulations and to create a bureaucratic monster. Government does not have an answer for all of our ills and it is time it admitted it. □

Orange W. Wilborn

Current Status of Adjuvant Therapy for Breast Cancer

JOHN HORTON, MB, ChB
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New approaches that can be used after surgery for apparently localized breast cancer may be capable of improving the results.

I. Introduction:

It is anticipated that almost 1,000 new diagnoses of breast cancer will have been made in the State of Oklahoma during 1976. The figure is 88,000 nationally and the incidence is slowly rising⁸. The general public, especially following the recognition of the disease in some well-known women, is more aware of the importance of early diagnosis. Early results of the breast cancer detection demonstration projects

suggest that patients diagnosed by these means have earlier disease. Nevertheless, the bulk of patients still present with regional or more extensive disease, and the death rate from breast cancer has remained static for many years. It seems logical, therefore, to examine recent changes in treatment approaches for patients with local or regional disease to ascertain whether more wide spread application of these might improve the survival from this common disease.

2. Routes and timing of metastasis:

Spread from breast cancer may be local, regional or distant. Local extension includes disease in the operative scar and involvement of the chest wall. This must be distinguished from regional spread that occurs to the lymph nodes in the axilla, supraclavicular and internal mammary area. Expansion of internal mammary metastasis may sometimes cause erosion through the chest wall. This is regional and not local spread. Distant metastasis can occur to any organ. The bone, liver, lungs, endocrine organs and the brain are those most frequently affected. It seems apparent from survival studies that, even though breast cancer presents in an apparently localized fashion to the breast, distant metastasis will eventually occur in the majority of patients.

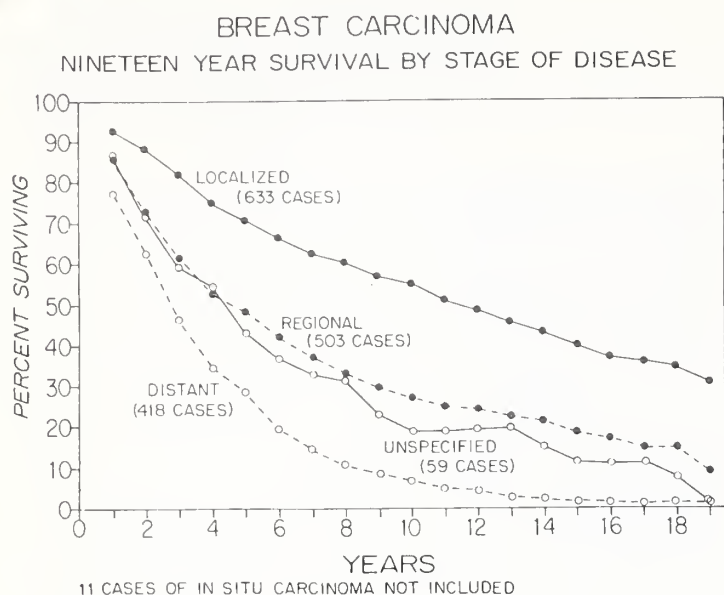


Figure 1.

Figure 1 demonstrates the 19-year survival of patients with localized disease treated with radical mastectomy at the Albany Medical Center Hospital.²⁴ Most of these patients died of breast cancer. This experience agrees with that of the 820 patients studied in the First National Surgical Adjuvant Project who had a ten-year survival rate of 46%.¹⁶ The traditionally held belief was that the primary tumor (T) spread first to the regional lymph nodes (N) and only then metastasized to distant areas (M). In fact, spread to lymph nodes and distant areas probably occurs simultaneously in most patients. It is our capacity to more satisfactorily examine the lymph nodes for evidence of disease that led to the belief that the spread occurred to the nodes first. It follows then, that most patients presenting with apparently localized disease have unrecognized systemic metastasis at that time. The majority of metastases from breast cancer become evident within the first five years after initial treatment but some may appear even decades later. These late metastases may indicate some failure of the host tumor containment mechanisms.

3. Definition of Risk:

Doctor Haagensen described several risk factors in patients presenting with breast cancer.²⁰ Those patients with skin or deep tissue fixation, with large tumors and with fixed axillary nodes are difficult to control locally and have a greater incidence of metastatic disease. There is also evidence that medially-

placed primary lesions are more likely to develop internal mammary regional spread than those situated in other parts of the breast.²² Patients with the so called inflammatory cancer are at very high risk of both local and metastatic spread. Multicentricity and histological evidence of vascular or lymphatic permeation are also associated with a higher risk of local recurrence. The Oklahoma Breast Cancer Network has noted a very high risk of metastasis in patients who have undifferentiated cancer with a diffusely infiltrating border rather than a pushing edge.

Many studies have confirmed that the extent of axillary regional lymph node metastasis plays a significant role in determination of the likelihood of both local spread and distant metastasis and survival. The 10-year failure rates in a study of the National Surgical Adjuvant Breast Project were 24% for patients with histologically negative axillary nodes, 65% for one to three positive nodes and 86% for four or more positive nodes.¹⁶ Similar results hold true if the proportion rather than the absolute number of nodes involved is examined. Thus the extent of axillary node involvement is now the best indicator of the risk for metastasis and survival.

Various tumor markers are being tested for their capacity to estimate the total-body tumor burden. These include carcinoembryonic antigen (CEA) alpha feto protein and the urinary excretion of polyamines.³⁹ Refinements or additions to these techniques in the future may provide an accurate determination of tumor size that can be used to define risk. Nevertheless, at the present time, the extent of involvement of the axillary lymph nodes is the prime prognostic factor.

4. Role of Surgery:

Surgery represents the primary weapon in the fight against breast cancer. Until the mid-1800's, local excision represented the only surgical treatment for breast carcinoma. It was at best palliative. Sir James Paget stated he was unaware of any single clear incidence of recovery with the patient living more than ten years free from the disease. Surgical techniques improved with the description by William S. Halsted of the present day radical mastectomy in the late 1800's.

The lack of benefit noted in patients with advanced disease on whom radical mastectomy

was done led to the development of clinical classifications of operability. Drs. Haagensen and Stout analyzed 1544 cases of breast cancer seen at Presbyterian Hospital between 1915 to 1942,²¹ to determine clinical criteria of operability. Note that these clinical criteria must be differentiated from pathological staging which is performed postoperatively.

There have been through the years many people dissatisfied with the results of radical mastectomy. The anatomical deformity of the standard radical mastectomy is unchangeable, but the functional defects are often related to operative skill and postoperative care. Many instances of failure to control the disease are a result of the injudicious use of the operation on patients who are not clinically operable. In recent years, less radical operations either alone or together with irradiation have been developed. Accompanying these procedures have been numerous statistics showing results as good as or almost as good as radical mastectomy. Because of the different means of comparing the results and the lack of standardization of disease staging, the final decision of what is an optimal surgical approach has yet to be made.

Since proper postoperative care demands knowledge of the extent of involvement of axillary lymph nodes, an axillary dissection is necessary. Many surgeons still prefer to perform a formal radical mastectomy but leave the clavicular head of the pectoralis major muscle to decrease the subclavicular deformity and protect the axillary vessels. Other surgeons follow a practice of performing a modified radical mastectomy when it is possible to safely leave the pectoralis muscles in place. Both operations give excellent local control and are indicated for the vast majority of patients presenting with apparently localized disease. Lumpectomy or tylectomy alone is not sufficient treatment to insure local control.

5. Role of Radiation:

Radiation therapy is effective in palliation of metastatic disease.¹⁸ It is the indicated primary modality of treatment for patients with locally advanced disease and inflammatory breast cancer.^{18, 3} Furthermore, its role in treatment of early disease, to obviate mastectomy, is being studied.^{12, 35} There is, however, controversy as to the current role of adjunctive radiation in patients who have had a poten-

tially curative resection for localized breast cancer.

The risk of regional recurrence in patients with demonstrated spread to axillary lymph nodes is approximately 30%.³¹ Thus, the rationale for postoperative radiation has been to treat the regional areas at risk (apical axillary, supraclavicular and internal mammary areas) to obviate such recurrence. Similarly, those patients with large or multicentric tumors, skin or deep tissue involvement or unfavorable histologic characteristics are at high risk of developing chest wall recurrence and a policy of treatment of the chest wall has been used. There is general agreement that these approaches reduce the incidence of both local and regional recurrence.^{18, 31} Most authors believe, however, that this does not beneficially affect survival¹⁷ although others have shown that some groups of patients with more than four positive axillary nodes live longer.¹¹

The potential side effects of adjunctive postoperative radiation therapy include the possibilities of increasing the incidence of postoperative lymphedema of the arm, loss of skin on the chest wall, injury to ribs and localized radiation pulmonary reaction. The incidence of these complications is less than 10%.¹⁸ The extent of impairment of hematopoietic reserve is difficult to evaluate but some studies have demonstrated changes in immunologic reserve as measured by depression of thymic derived (T) lymphocytes.²⁸ The clinical significance of this is not known.

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Jane Self, MD, is Director of Medical Oncology at the Natalie Warren Bryant Cancer Center in Tulsa, Oklahoma.

W. Dean Hidy, MD, is with Surgical Associates, Inc., in Tulsa, Oklahoma.

Arthur F. Hoge, MD, is Project Director of the Oklahoma Hospitals Breast Cancer Control Network in Oklahoma City.

Frank McGregor, MD, is Vice-President of Medical Staff Affairs at Baptist Medical Center in Oklahoma City.

Morris Wizenberg, MD, is with the University Hospital and Clinics in Oklahoma City.

The mass of data suggests that radiation as the only adjunct is rarely indicated if adequate surgery has been performed both because of the lack of effect on survival and the fact that early regional recurrences can be controlled once they have become apparent.²⁷ In addition, there is evidence that effective surgical adjuvant chemotherapy can at least delay the onset of local and regional as well as systemic metastasis.^{2, 15} Nevertheless, there are cogent reasons for considering the use of radiation together with chemotherapy as an optimal adjuvant program in high risk patients. First, regional radiation therapy after surgery should reduce the host tumor burden to an absolute minimum, thus allowing the maximal potential for beneficial effect from systemic therapy. This biologic principle holds true in other clinical situations such as Wilms' tumor.³³ Second, an appreciable number of recurrences in patients treated with adjuvant chemotherapy alone are local or regional.³⁷ It would be expected that tolerance to a combined program would be good provided that adjustments are made in the doses of both modalities; for chemotherapy, a dose reduction of 33-40% in the initial course and for radiation a reduction of 10-15% in the total dose. Prospective studies, of course, are required to answer this question.

6. Systemic Adjuvant Therapy:

The biologic rationale for use of systemic treatment as an adjuvant to treatment has been recognized for decades. There are two major categories of treatment, hormonal and cytotoxic chemical.

Studies of castration include the 1957 Norwegian study³², the National Surgical Adjuvant Studies 2 and 3³⁶, the Manchester Ovarian Irradiation Study⁵, and the Toronto/London Castration Trial⁶. None showed a beneficial effect on survival although some patients experienced a delay in the onset of first recurrence. Androgens were shown to be of no benefit.³⁰ Dao⁹ has shown, in a small and non-randomized study, that adjuvant adrenalectomy prolonged the survival of a high risk group of 17 patients. Bland¹ has reported similar results from immediate oophorectomy and adrenalectomy. Measurement of tumor hormone receptors^{29, 26} may allow selection of a population of patients that might derive most

benefit from a hormonal additive or ablative approach.

The first patient in a large study of systemic adjuvant chemotherapy was entered on April 4, 1958. This was protocol No. 1 of the National Surgical Adjuvant Breast Project (NSABP). The study compared two approaches — treatment with conventional Halsted radical mastectomy followed by a single course of thiotepa and radical mastectomy followed by placebo. One thousand four hundred sixty-five patients were registered and 826 met the study criteria. At the end of five years there was no appreciable difference between the total treated and untreated patients in any nodal category. Patients with one to three nodes involved had a recurrence rate of 47%. This was 77% in patients with four or more positive nodes. In the group of premenopausal patients with four or more positive nodes, those receiving thiotepa had a 40% lower incidence of recurrence at 42 months than the placebo treated group. Subsequent evaluation of this particular group has shown a continued improved survival rate.¹³

Following this study, there was better realization that dividing neoplastic cells are more susceptible to chemotherapeutic agents than resting ones. As tumor mass increases, the percentage of cells in cell division decreases. Thus, the tumor with the least mass is the most susceptible to chemotherapeutic agents.³⁴ Also, there was a growing body of information regarding the efficacy of several chemotherapeutic agents used singly and in combination against systemic breast cancer and the knowledge that the low rate of growth of breast cancer would demand prolonged treatment.⁴

With the above information in mind, the NSABP group instituted a study beginning September 22, 1972, comparing the administration of L-Phenylalanine mustard (LPAM) at a dose of 0.15 mg. per kilogram daily for five days every six weeks, beginning no sooner than two weeks and no later than four weeks postoperatively and continued for a total of two years. Patients were stratified according to age and nodal status and randomized to LPAM or a placebo. Preliminary data at 18 months¹⁵ showed that treatment failures occurred in 22% of patients receiving the placebo and 9% of those treated with LPAM. Further followup indicates that the difference holds true only for premenopausal women.¹⁴ Nausea and vomiting occurred in 30% of patients receiving LPAM and 11% of patients receiving placebo. No pa-

tient demonstrated life-threatening complications. All treated patients demonstrated a decrease in white blood cell count at some time during therapy but this was not severe.

In 1973, a similar study was instituted by Bonadonna at the Italian National Cancer Institute that compared prolonged administration of cytoxan + methotrexate + 5-fluorouracil (CMF) to no therapy.² This combination was chosen because of the high activity of a similar combination of cyclophosphamide + methotrexate + 5-fluorouracil + prednisone in systemic breast cancer.⁴

A report after 30 months of the study showed treatment failure to have occurred in 24% of control patients and 5.3% of treated patients. This effect is less apparent, however, in postmenopausal patients. Severe bone marrow suppression was seen in 4% of patients and 67% displayed mild toxicity. Ninety percent of patients complained of nausea and vomiting and 55% had hair loss.

These two studies cannot be directly compared because of differences in the ratio of pre to postmenopausal patients and the proportion with one to three and four or more positive axillary lymph nodes. Nevertheless, it appears that there may be fewer failures in patients with more than three nodes if they had been treated with CMF. Neither study has had sufficiently long followup to judge effects on survival.

Many studies of adjuvant chemotherapy are now in progress. Long-term 5-fluorouracil is being compared with long-term cyclophosphamide therapy in Birmingham, England. In Moscow, there is a protocol comparing thiotepa and cyclophosphamide. In Tokyo, 5-fluorouracil is being contrasted with 5-FU plus cyclophosphamide and mitomycin C.

In the United States, the Mayo Clinic is comparing LPAM with cytoxan, 5-FU and prednisone (CFP). The National Surgical Adjuvant Breast Group is comparing LPAM with LPAM plus 5-FU and the Southwest Oncology Group is comparing LPAM with a five-drug combination of vincristine, cyclophosphamide, 5-FU, methotrexate and prednisone (COMPF).

Work is continuing in patients with metastatic disease to define the most effective and least toxic drug combination regimens so as to determine an optimal adjuvant regimen. One attractive approach is the use of non-cross-resistant drug combinations. Early clinical

experience²⁵ suggests that this concept is valid and may even allow incorporation of the effective, though toxic, drug adriamycin into the schema.

The lack of direct evidence that adjuvant chemotherapy has prolonged survival raises the question of whether it may in the end do more harm than good. The acute side effects are well known and, especially with combination chemotherapy, include a good deal of morbidity and a low incidence of mortality. These combinations should be given by experts. Long-term effects include potential damage to various organs. The bone marrow, heart, liver, endocrine and sex organs are probably the most susceptible. It is difficult to estimate the increased risk of second primary tumors but this is likely to be small. In the NSABP LPAM study, six new cancers have emerged, four in the LPAM group.¹⁴ Both new cancers in the Bonadonna CMF study were in the no treatment group.³⁷ The emergence of metastasis that is already resistant to chemotherapy is probably a greater risk.

It is likely that the benefit from effective adjuvant chemotherapy outweighs both the known and potential toxicity in premenopausal patients who have involved axillary nodes. This balance may be reversed in "good risk" patients who have no axillary node involvement.

7. Immunology:

Measurement of host immunologic parameters such as delayed hypersensitivity reactions to dinitrochlorobenzene (DNCB) or phytohemagglutinin (PHA) correlates with survival in patients with metastatic disease.⁷ *In vitro* assay methods are being developed. Surgical excision of axillary lymph nodes can theoretically reduce immune competence as can localized radiation therapy but these are of no demonstrated clinical significance. Short-term courses of chemotherapy induce no permanent changes and may even stimulate a temporary "immune flare" with repeated doses.²³ This would suggest that intermittent rather than continuous chemotherapy might be a preferable adjuvant approach. Data from leukemic children treated for consolidation of remission suggests that recovery of immunologic competence that was reduced by chemotherapy occurs within a few weeks.¹⁹ Adjuvant chemotherapy of breast cancer causes

suppression of dinitrochlorobenzene (DNCB) reactivity³⁸ but there are no data yet on the speed of recovery.

Non specific immune stimulants such as Bacillus Calmette Guerin (BCG) or Corynebacterium Parvum (C. Parvum) have been suggested to improve the immune response and to reduce hematologic toxicity. These give significant morbidity and, since benefit has not been confirmed¹⁰, should still be considered experimental.

8. Summarization of optimal current approaches in three categories:

It seems reasonable to consider the patients presenting with apparently localized disease in three categories. Those with no involvement of axillary lymph nodes, those with between one and three nodes involved and those with more than three nodes involved.

(a) 0 nodes — These patients have a 24% of possibility of recurrence at ten years and most will still be alive. Thus their prognosis is good. There are no data to suggest additional survival benefit from either adjuvant chemotherapy or radiation therapy. The patients at highest risk are those with medially placed, large or multifocal lesions and radiation therapy could be considered in these cases if there is evidence of skin or deep tissue fixation. Studies are needed to determine whether adjuvant chemotherapy will be of benefit.

(b) 1-3 nodes — The expectation of metastasis at ten years is 65% and survival is 38%. These patients are at higher risk. The preliminary evidence suggests that LPAM will delay the onset of metastasis in premenopausal patients and combination chemotherapy may in post-menopausal patients. Although the effect on survival cannot be predicted, it seems reasonable that the use of systemic therapy is in order. Radiation therapy was traditionally used and consideration should still be given to using this in conjunction with the adjuvant chemotherapy in order to reduce the likelihood of local and regional recurrence.

(c) 4+ nodes — These patients are at high risk. Metastasis will occur in 86% of patients at ten years and 87% will die. Here, there is a larger tumor burden and a more aggressive adjuvant systemic approach is logical. This could involve the use of combinations such as

cytoxan, methotrexate and 5-fluorouracil (CMF) or cytoxan, 5-fluorouracil and prednisone (CFP). In some situations, ablative therapy in patients who have tumors that contain estrogen receptor would also be a reasonable option. Again, the role of radiation therapy as a combined modality approach together with chemotherapy should be considered.

9. Proposed study for Oklahoma:

Key oncologists in the state, including radiation, surgery, pathology and medical oncology, feel that hard and fast guidelines cannot be given for post-surgical adjuvant treatment. Therefore, they have instituted a study to try and answer the question, in high risk patients with regional lymph node spread, whether the combination of radiation therapy used to achieve regional control plus chemotherapy to control micro-metastasis will be more beneficial than the use of chemotherapy alone. Patients who have had a radical or modified radical mastectomy and who have involved axillary lymph nodes will be randomly allocated to receive chemotherapy either alone or with postoperative radiation therapy. There is an additional part of the study that will attempt to define whether the potential benefits of LPAM used in patients without lymph node metastasis will outweigh its side effects. Thus, there will be a randomization for this group of patients between LPAM given for two years vs no therapy.

10. Conclusion:

The incidence of breast cancer is rising and the death rate from the disease has remained stable for many years. Although advances in diagnostic techniques are bringing some patients in for treatment at earlier stages, approximately 41% of patients in Oklahoma still present with regional or worse disease. Radical or modified radical mastectomy both give excellent local disease control. Long-term adjuvant chemotherapy to treat micro-metastasis is capable of delaying the onset of recurrence both locally and in distant sites but, as yet, this had not been translated into longer survival. It is possible to define the risk for metastasis by careful examination of the axillary lymph nodes. Suggestions for management of patients with different degrees of lymph node involvement are given. A study to be carried out in

Oklahoma to define the role of radiation therapy together with adjuvant chemotherapy is described. It is anticipated that these more aggressive post-surgical approaches will improve the survival of patients with this common disease.

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The Diagnosis and Management of Diabetes Insipidus in Children

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Diabetes insipidus in childhood presents diagnostic and therapeutic problems which are reviewed. Current investigations are showing that vasopressin-sensitive patients are effectively treated with a new intranasally administered vasopressin analogue (DDAVP).

Diabetes Insipidus (DI) is a disorder characterized by an inability to conserve water and episodes of dehydration. It is due to a deficiency of antidiuretic hormone (ADH) or a defect at the site of action. In children, dehydration is often excessive in spite of compensation by drinking, and in the infant who is dependent on bottle feeding, dehydration may progress unheeded¹. Precipitous uncorrected water loss may also occur in patients with destruction of the thirst center by tumors which also impair ADH production. Thus, it is essential that these factors be considered at the time of diagnosis.

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In order to have a working classification, it is helpful to consider DI in terms of the site of the lesion, secretion of ADH and its peripheral action. For example, when normal amounts of ADH are secreted in response to physiological stimuli (eg hyperosmolality and hypovolemia) ADH acts at receptor sites on the distal renal tubules and collecting ducts resulting in increased permeability to water and flow across the mucosal cell surface². For the water-conserving mechanism to be effective, it is essential that an osmotic gradient exists toward the hypertonic interstitium of the renal medulla³. Thus, DI may result from disruption of the basic antidiuretic mechanism at any point from the synthesis and secretion of ADH in the hypothalamus to the site of water conservation in the renal medulla.

ETIOLOGY

The cause of DI rarely may be an inherent primary defect or, more often, secondary to one of many different disorders (Table 1). Frequently, it is not possible to demonstrate a cause and the diabetes insipidus is loosely labelled "idiopathic." However, it should be realized that in some cases this may represent an early manifestation of organic disease involving the hypothalamus. In some cases there may be a family history of vasopressin-sensitive diabetes insipidus, a rare hereditary

defect of the neurosecretory cells of the supraoptic nucleus⁴. The condition is autosomal dominant in some pedigrees and X-linked recessive with partial expression in the affected females in others. The diagnosis requires documentation of vasopressin sensitivity and a familial incidence⁵. When causes have been excluded systematically from the site of vasopressin synthesis in the hypothalamus to the site of action, excessive degradation of vasopressin may remain a possibility. Nine patients previously thought to have idiopathic DI were shown by Hankiss *et al* to have a shortened duration of action for administered vasopressin and a subsequent poor response to therapy⁶, however, the evidence for the phenomenon might have been more convincing if vasopressin levels had been measured to demonstrate shortening of the half-life. It is interesting that two of the patients with increased inactivation had histiocytosis since the expected site of involvement in this disease would be the hypothalamus.

TABLE I. ETIOLOGY OF VASOPRESSIN-SENSITIVE DIABETES INSIPIDUS

TRAUMATIC

Skull fracture
Post-operative

VASCULAR

Intraventricular hemorrhage
Post partum pituitary infarct
Sickle cell disease*

INFLAMMATORY

B Hemolytic streptococcus
Pneumococcus
Listeria Monocytogenes
Brucellosis
Tuberculosis
Syphilis
Encephalitis
Smallpox vaccination

CNS INFILTRATION

Histiocytosis
Sarcoidosis
Leukemia
Hodgkin's disease

CNS MALIGNANCY

Craniopharyngioma
Optic glioma
Pituitary adenoma or carcinoma
Hypothalamic glioma
Pinealoma

MISCELLANEOUS

Idiopathic
Familial
Accelerated vasopressin degradation
Laurence-Moon-Biedl syndrome
Hydrocephalus

The degree of diabetes insipidus following removal of a craniopharyngioma will depend on technical difficulties encountered and on the anatomical site of the tumor. Although its origin from buccal epithelium invagination (Rathke's pouch) is similar to that of the anterior pituitary, the tumor almost always originates at a suprasellar site. DI results from downward compression of the tumor on the pituitary or supraoptic-hypophyseal tract. Rarely, parts of the tumor extend into the sella. Although considered a benign tumor, the compressive effects of recurrent cysts on the surrounding structures such as the optic tract, hypothalamus and ventricular system, may be severe. For this reason surgical removal remains a formidable challenge for the neurosurgeon, and he may need to transect the supraoptic-hypophyseal tract to facilitate removal. Therefore in most cases DI is an expected sequel to surgery.

Secondary DI also may be due to congenital, traumatic, inflammatory and neoplastic causes. (Table 1) Of these, the most difficult to diagnose may be histiocytosis because of the insidious onset. When involvement of the hypothalamus occurs, the first manifestation may be DI and, in many cases, it is labelled idiopathic until other stigmata become manifest (skin rash, osteolytic lesions, hepatosplenomegaly, etc). Secondary causes are usually outside the sella. Occasionally, however, intrasellar lesions of the anterior pituitary extend posteriorly to damage the posterior pituitary such as an adenoma or an abscess which may simulate an adenoma⁷.

DIAGNOSIS

It is important to assess the patient's affect during history taking because of the possibility of compulsive water drinking. The history should be meticulous, with questions regarding amelioration, aggravation, consistency of the complaint, and associated complaints such as headache or visual disturbances. Clinical examination rarely may indicate the site of an organic lesion. For example, hypothalamic and pituitary disease will manifest as pituitary hormone deficiencies (short stature, hypothyroidism, hypogonadism) or hypothalamic obesity. The variety of traumatic, infectious and neoplastic causes listed in Table I, may present as acute problems which require accurate diagnosis in order that appropriate

*Vasopressin-resistant DI may also occur in sickle cell disease due to 'sickling' and hypoxia in the renal medulla.

treatment may be planned. Baseline diagnostic tests should include electrolytes, blood sugar, blood urea nitrogen, serum and urine osmolality, urinalysis, 24-hour urine volume, and random urine specific gravity. A complete blood count should be done to exclude hematological causes such as leukemia and sickle cell disease; and the need for skull x-rays is clearly evident. Tests for anterior pituitary function should include serum thyroxine (T₄), triiodothyronine resin uptake, thyrotropin, and diurnal serum cortisols. Assessment of pubertal stage and growth velocity should suffice for estimation of gonadotropin or growth hormone deficiency and hormonal assays should be done when indicated by the clinical findings.

When initial evaluation suggests organic diabetes insipidus, confirmation is obtained by doing a water-deprivation test. This is done under careful supervision, in order to avoid more than 5% weight loss and dehydration. The test is started at 8:00 AM followed by serial, hourly measurements of serum osmolality, urine volume, and body weight. After appropriate weight loss has occurred, the response to five units of subcutaneous aqueous vasopressin is tested. A normal patient demonstrates a maximum urine osmolality exceeding that of the plasma, and which does not increase more than 5% after pitressin injection. It should be stressed that dehydration should be monitored carefully in children, particularly when weight loss exceeds three percent.

Since the deficiency of ADH is seldom absolute, it is sometimes possible to demonstrate a partial defect⁸. This is done by continuing water deprivation until the urine osmolality fails to increase further. At this point, the limited reserve of ADH is insufficient to increase the urine concentration which remains constant. When the response to vasopressin is tested, patients with severe DI will respond by significantly increasing their urine concentration (by more than 50%) whereas patients with partial DI will increase their urine osmolality to a steady state during water deprivation with a further increase after aqueous vasopressin (by more than 9%). Patients with nephrogenic DI will fail to increase their urine osmolality following dehydration or vasopressin indicating end-organ resistance to endogenous and exogenous vasopressin.

This condition is difficult to diagnose and supportive evidence should be sought from the history⁹. Primary polydipsia usually occurs in adolescent girls; however, it may occur in young children¹⁰. Hysteria and depression are

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the most commonly associated psychiatric manifestations which often affect prognosis. The physician's suspicions may be aroused if the polydipsia is variable in severity, alternating with episodes of normal fluid intake. All cases with a history of compulsive water drinking should be investigated for an organic hypothalamic lesion because this may possibly stimulate the center involved in thirst perception or destroy the center that signals satiation of thirst¹¹. Since this is a disease of excessive water intake, the serum osmolality will usually be lower than the levels commonly found in DI⁹. These patients usually show a normal increase in urine concentration after fluid deprivation although in some cases there is no response because the renal medullary osmolality has been lowered by the excessive flow of urine which renders the counter-current mechanism of Wirz ineffective⁹. Nevertheless, it has been found to be the general rule that patients with psychogenic polydipsia excrete a more concentrated urine following water deprivation than after pitressin, whereas the patient with true DI does the opposite⁹.

NEPHROGENIC DI (VASOPRESSIN-RESISTANT)

Although the emphasis of this article is on vasopressin-sensitive DI, it should be mentioned that vasopressin-resistant or nephrogenic DI is a genetically determined disorder which is clinically similar to diabetes insipidus. The renal tubular cells are insensitive to vasopressin and the disorder is clinically manifested by severe diuresis in early infancy. When nephrogenic DI presents in a newborn male infant with a family history indicating sex-linked recessive inheritance, the diagnosis is seldom in doubt, especially if the mother has polyhydramnios. However, a milder defect may present in infant girls during the first year, and when the pedigree is reviewed it may be realized that these girls are carrier females who have fewer affected renal tubule cells¹². According to the Lyon hypothesis, early in fetal life there is random inactivation of one of the X chromosomes which persists in many cell nuclei throughout life. Since the gene locus is on the X chromosome, carrier females are mosaics with some normal and some abnormal cells¹³. Thus, nephrogenic diabetes insipidus in heterozygous females is less severe than in affected males who have a single X chromosome inevitably carrying the defective gene.

1. Familial Nephrogenic DI (vasopressin-resistant): Although thiazide diuretics are of considerable benefit when combined with a low solute diet to reduce the osmolality in the distal nephron, the long-term result is less than ideal¹⁴. This paradoxical effect of thiazide diuretics is thought to be due to sodium diuresis which is followed by enhanced sodium reabsorption in the proximal tubules and consequently production of a relatively hypotonic urine in the distal tubule and collecting system where there is some water conservation. Vasopressin and its analogues have been totally ineffective because the defect appears to be a lack of receptor sites for vasopressin¹⁵. This is evidenced by failure to form adenosine 3', 5'-monophosphate (cyclic AMP) and the findings of vasopressin in the urine in excess of that found in normal subjects¹⁶. This may mean that vasopressin fails to bind to receptor sites and therefore adenyl cyclase is not activated to form cyclic AMP.

2. Vasopressin-sensitive DI: Following the development of a process to separate oxytocin from vasopressin, vasopressin was successfully extracted from bovine and porcine posterior pituitary glands¹⁷. The methodology has changed very little since 1928, and this preparation has been the most frequently used. However, recently a change in the method of slaughtering hogs and cattle in the USA (shooting between the eyes) results in destruction of the posterior pituitary gland. This has resulted in a temporary shortage of pitressin preparations from these sources.

The proper procedure for administration of pitressin tannate in oil must be thoroughly taught to the patient or his parents. The vial should be warmed in hot water and shaken so that the brown pellets of pitressin tannate are uniformly dispersed in the peanut oil vehicle. A 22 gauge needle is the minimal bore through which the oil may be injected intramuscularly. Following deep intramuscular injection, the area should be massaged vigorously. Subcutaneous administration is unsatisfactory and frequently results in cutaneous induration. Older children may be taught to give the dose when they become polyuric. The duration of action may vary depending upon the severity of the DI and the rate of degradation, therefore, the initial dose for any preparation should be low to avoid water intoxication. Sub-

sequently, the optimally effective dose can be determined by cautiously increasing the dosage, but only administering when polyuria and thirst recur.

In many cases the patient prefers an alternative to intramuscular pitressin tannate. Chlorpropamide is an effective oral agent and has been used in children¹⁸. However, it may be used only in cases of partial diabetes insipidus, because it acts only in the presence of circulating antidiuretic hormone. Side effects of chlorpropamide are significant, such as intracanalicular biliary stasis, skin eruptions, bone marrow depression and in many cases, symptomatic fasting hypoglycemia occurs. Mahoney and Goodman¹⁹ have observed that this sulphonylurea will restore thirst in patients with hypodipsia so that it may have a specific indication. There are other agents less frequently used such as carbamazepine (Tegretol)²⁰ and clofibrate²¹ which have an action on ADH release. With the synthesis of certain vasopressin analogues, however, these agents will be used less often.

Synthetic lysine vasopressin is available as a nasal spray (Diapid)²². The duration of action is from three to five hours²³, so that its use is limited to patients with mild diabetes insipidus or it may be used as an adjunct to vasopressin tannate in oil. It is convenient for patients to carry a bottle of Diapid spray for use when the effect of the long-acting injection wears off unexpectedly during working or school hours. Diapid has the added disadvantage of causing side effects such as nasal congestion, pruritus, ulceration and occasionally diarrhea and heartburn.

1-deamino-8-arginine vasopressin (DDAVP) is a new, synthetic analogue of vasopressin which lacks the pressor activity of other preparations such as pitressin and lysine vasopressin, and has a 12-hour duration of action when given as an intranasal preparation²⁴. It is structurally similar to arginine vasopressin (AVP), the hormone naturally occurring in man, except for two differences: At position 1, deamino-cysteine replaces cysteine and at position 8 D-arginine replaces L-arginine, (Fig. 1), changes which contribute to the prolonged action of DDAVP²⁵. The high antidiuretic effect is attributed to changes at positions 1 and 8 which delay enzymatic degradation whereas the substitution of L-arginine at position 8 for

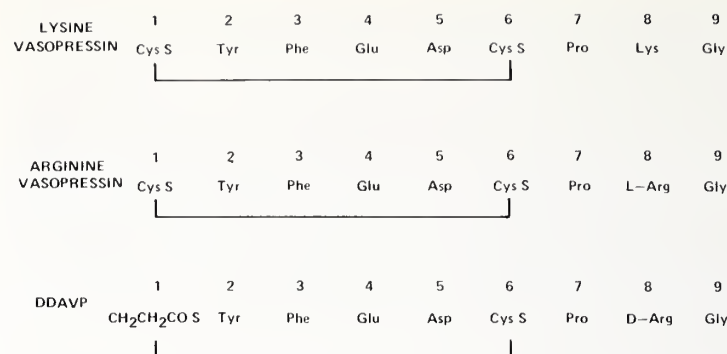


Figure 1. Comparison of the amino-acid sequence of three vasopressin analogues; lysine vasopressin, arginine vasopressin and DDAVP.

its isomer, D-arginine specifically results in lower pressor activity. The antidiuretic/vasopressor ratio of AVP is 1²⁵ and for DDAVP it is estimated to be between 2,500 and 4,500 when used in the therapeutic dose range.²⁶ Therefore, DDAVP has virtually no pressor effect, consequently the side effects associated with pressor activity are absent. Furthermore the effects seen with other preparations, such as headache, abdominal pain, and pallor of the skin have not been observed.

The high antidiuretic activity of DDAVP may raise the question of an increased risk of water intoxication. This risk is certainly present while using pitressin tannate injections and could occur using DDAVP. This complication can be avoided, however, if the patient is started on the lowest effective dose *eg*, 5 µg on a twice a day regimen²⁶. It should be stressed that the dose is less critical than the frequency, and that too frequent administration will result in an overlapping effect and the possibility of water intoxication.

There are definite beneficial effects of DDAVP on the general health of the child. Kauli and Laron observed that diabetes insipidus interferes with school attendance, social activities and night rest, and that the use of intranasal DDAVP results in considerable abatement of these disturbances²⁷. A more recent survey done on 21 children with diabetes insipidus who were treated with DDAVP showed that 13 slept better at night, eight had more energy during the day, and five had an improvement in school performance²⁸. The authors concluded that this all around improvement is mainly because sleep was uninterrupted by urination. It should also be emphasized that optimal control is important in childhood to prevent stunting of growth and hydronephrosis and to obtain this goal, selection of the most effective medication is important²⁹.

SUMMARY

Diabetes insipidus may result from a variety of causes which disrupt the basic physiologic mechanisms for water conservation. Diagnosis of the primary disease is often a priority following which tests of antidiuretic hormone function are performed. Of these tests, the water deprivation test gives the most useful diagnostic information in terms of failure to concentrate the urine and delineating the degree of completeness of the defect. Nephrogenic diabetes insipidus is readily diagnosed by demonstrating vasopressin resistance, whereas compulsive water drinking is less readily distinguished. Treatment of vasopressin-resistant DI remains unsatisfactory. In contrast, there have been gratifying advances in the treatment of pitressin-sensitive DI. With advances in molecular biology and facilities to synthesize vasopressin analogues, a new long-acting preparation has been developed and prepared for intranasal use. This analogue, DDAVP, has the advantage of long duration of action and freedom from vasopressor effects. It allows patients to sleep through the night and to follow a normal routine during the day uninterrupted by frequent urination.

DDAVP is available for use by the authors at the Oklahoma Children's Memorial Hospital, Oklahoma City, according to a protocol which has been approved by the Food and Drug Administration. We encourage physicians to refer patients who wish to participate in these studies for a trial of this medication.

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The Role of the Oklahoma County Medical Society in Territorial Medicine, 1904-1905

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Members of the Oklahoma County Medical Society influenced medical legislation and professional organization during the whole territorial period, but especially during 1904-05, when AMA leadership improved professional standards throughout the nation.

Seventy years ago the editor of the territorial medical journal commented: "The Oklahoma County Medical Society has taken the lead in the upholding of the standard of the practice of medicine in Oklahoma."¹ Founded as an affiliate of the territorial and American Medical Associations on December 4, 1901, the Oklahoma County Medical Society (OCMS) met the professional, scientific and social needs of its members, and fought for the right of good medical care for the citizens of the county and

territory. The extant minutes of the society, beginning March 10, 1904, shed much light on the activities of the fledgling society.² This period was important for medicine in the territory. Reorganization of the AMA and its component state associations took place, the war on "quacks" was at its height, and the ground work was laid for amalgamation of the Oklahoma Territorial Medical Association and the Indian Territory Medical Association. Members of the OCMS were prominent among the territorial medical leaders.

Oklahoma Territory in 1904-1905 included 38,715 square miles organized into 26 counties, with Guthrie the capital city. The population of the Territory was nearly 800,000. Fifteen years after its birth during the "run" of April 22, 1889, Oklahoma City was still in its adolescence. Although it had 35,000 inhabitants and could boast of telephones, streetcars, numerous churches, two daily newspapers, and an occasional automobile, it still retained a boisterous aspect with 60 saloons, dozens of gambling houses and a thriving red light district in "hell's half acre."³ An editorial in February, 1904, stated: "By virtue of the fact that Oklahoma City has thrived and grown so rapidly it has seemed to catch the eye of the quack and

the imposter as no other in the country."⁴ By 1905 there had been roughly 3,000 licenses granted to practice medicine in Oklahoma, but 405 of these physicians had died, moved away, or given up medicine. Of those remaining, approximately 75% were allopaths, 20% eclectics, and 5% homeopaths and physiomedicalists. Thirty-nine osteopaths had been granted licenses, although they were not permitted to prescribe drugs or perform major surgery.⁵

In contrast to the preceding years, 1904 and 1905 were relatively healthy for Oklahoma residents. There were no widespread epidemics, although a few cases of smallpox occurred, and there were frequent cases of diphtheria, whooping cough, malaria, and typhoid fever. Apparently there was no paucity of physicians in the prospering territory. Indeed, a contemporary physician noted: "The number of doctors was out of all proportion to the population." After two months of practice he had made one call and collected two dollars.⁶

The earliest organization of the medical profession in Oklahoma Territory occurred in June, 1889. Although the village of Oklahoma City was still unincorporated, regular and irregular physicians there jointly formed the first Oklahoma Medical Society. This organization excluded quacks and druggists, but it was short-lived. It apparently failed to fulfill the expectations of the regular practitioners. In 1890 the physicians of the area formed another Oklahoma Medical Society. This new society followed a stringent code of ethics modelled on that of the AMA, and limited its membership to graduates of AMA approved schools. This society apparently disbanded in May 1893, after most of its members attended the organizational meeting of the Oklahoma Territorial Medical Association in Oklahoma City.⁷

The present Oklahoma County Medical Society was founded in December 1901 under the auspices of the territorial association.⁸ Minutes of the OCMS for its first two and one-half years have not survived. Reports in the public press and the territorial medical journal reveal little of the society's activities except announcements of upcoming meetings. Society members, however, were prominent in a number of professional and civic endeavors.^{9, 10} The OCMS served as host for the territorial meeting in November 1903, and county members contributed three papers. The press covered the event extensively, revealing publicly not

only the substance of the meeting but also the success, failure and disparity of treatment among individual physicians.¹¹

The Oklahoma County Medical Society scheduled bimonthly meetings except during the summer. The physicians gathered at the offices of members in rotation usually on the second and fourth Thursdays. However, the Society's growth to fifty members by the end of 1904 apparently prompted the search for larger quarters. At the December 8, 1904 meeting, Doctor Delos Walker reported that "the Library could be secured with the provision of 'no smoking allowed' at the cost of \$1.00 per night." The doctors had approved expenses for cigars on several occasions, so this matter required reconsideration. The members decided to meet in the Assembly Hall at the Carnegie Library on December 22, and the next three meetings were held there. On February 9, 1905, however, with only \$1.30 left in the treasury, a motion was carried to "dispense with the rents which lessen our banquet money," so the meetings returned to the members' offices. The format of the meetings was fairly flexible, but usually consisted of reports from various committees, consideration of new applicants, and the presentation of a professional subject. Dinner at a local cafe followed.

In 1904, the officers were Doctor J. F. Messenbaugh, president; A. D. Young, vice-president; and W. M. Taylor, secretary-treasurer, and in 1905, Doctor A. D. Young, president; W. J. Jolly, vice-president; and L. A. Riely, secretary-treasurer. Doctor Messenbaugh served as city coroner in 1904, and as mayor of Oklahoma City in 1905-06. He was graduated from Washington University Medical School, St. Louis, Missouri, in 1898. After postgraduate work in Chicago, New York, and New Orleans, he moved to Oklahoma City in 1900, and played a conspicuous role in professional and civic affairs until his death.¹² Doctor Antonio D. Young graduated from Barnes Medical College, St. Louis, Missouri, in 1895. He practiced medicine in Illinois until he came to Oklahoma City, in 1901. Doctor Young also served on the Epworth faculty, and subsequently became the first professor of neurology of the University of Oklahoma School of Medicine.¹³

The OCMS listed in its ranks a number of other physicians well known throughout the territory. Doctors C. B. Bradford and Delos Walker had been instrumental in the earliest

attempts at medical organization in the territory. The Oklahoma Medical Society of 1889 held its first meeting in Doctor Bradford's office. In 1893 Doctor Walker was elected the first president of the Oklahoma Territorial Medical Association.¹⁴ Doctor Archa K. West, a native of Mississippi, graduated from the Memphis Hospital Medical College in 1894. He practiced in Texas for several years before moving to Oklahoma City in 1899. He was president of the Oklahoma Territorial Medical Association in 1904-1905. Doctor West was Dean of the Epworth College of Medicine in Oklahoma City from its inception in 1904. After its amalgamation in 1910 with the University of Oklahoma, he became the first head of the Department of Medicine of the University of Oklahoma School of Medicine¹⁵ (Figure 1).

Reflecting the professional fellowship of its members, a major part of the society meetings in 1904-05 was devoted to medically related presentations. The centers of medical science were distant, yet the members demonstrated scholarly interests. Papers presented at the



Doctor Archa K. West; 1865-1925

Courtesy, University of Oklahoma Health Sciences Center Library

1904 meetings included: "Appendicitis" by W. J. Jolly, "Bronchitis" by J. A. Reck, "Dysentery" by U. L. Russell, "Management of Acute Diseases of the Prostate" by L. A. Riely, and "Puerperal Infection" by J. A. Reck. The article by Doctor Jolly was published in the territorial medical journal.¹⁶ Members of the OCMS also participated actively at the biennial meetings of the territorial medical association in 1904, while Doctor A. K. West served as its president. "Medical Diagnosis" was presented by H. C. Todd, "Septic Infection, Prevention and Treatment" by W. J. Jolly, and "Erysipelas" by C. R. Day.^{17, 18}

In 1905 many professional papers were read at the OCMS meetings, namely: "Puerperal Infection" by K. R. Rone, "Strangulated Hernia" by H. C. Todd, "Bronchopneumonia" by W. M. Taylor, "Convulsions" by [J. B. ?] Rone, "Conservative Medical and Surgical Treatment of Appendicitis" by U. L. Russell, "Acute Cystitis" by R. T. Edwards, "Diphtheria" by L. A. Riely, "Hysteria" by A. D. Young, and "Surgical Technique" by R. M. Howard. Also two papers by OCMS members were presented at the May meeting of the territorial association: "Hernia" by G. A. Wall, and "The Advance of Ophthalmology during the Last Twenty Years" by L. H. Buxton.¹⁹

In addition to topical papers, individual case reports were frequently brought before the county society. Talipes equinovarus, spina bifida, and carcinoma of the liver were presented in 1904. Pathological specimens were occasionally demonstrated; for example, Doctor L. A. Riely showed a specimen of "tuberculous epididymitis he removed under cocaine." At other times common disorders, such as diphtheria, were introduced for general discussion by the members. Far from being sedate exchanges of ideas concerning diagnosis and treatment, these discussions were often lively. After considering bronchopneumonia at the meeting on March 23, 1905, the secretary noted: ". . . it would appear they did not all know just what they were discussing. . ."

The subject of fees came up several times during the county society meetings in 1904-1905. The average physician in the territory earned approximately \$750.00 annually, but his business expenses were also small; for example, coverage of malpractice insurance to \$25,000 cost only \$20.00.^{20, 21} During 1904, the society members were particularly concerned about the collection of fees from numerous in-

dividuals referred to as "deadbeats." The following motion was made and carried at the April 28, 1904 meeting:

. . . physicians with patients' names on their books who come under the head of 'deadbeats' report same to secretary who shall keep a list of same for reference and same to be furnished to members on request and further that it be left to the discretion of each member whether or not he visit those named in this class.

A published editorial discussed the numerous demands for gratuitous medical service, and staunchly defended the physician's right to his fee.²² The deadbeat list of the OCMS was kept active and revised again in 1905.

The county society set a standard for medical fees. At the May 4, 1905, meeting it was decided that the charge for a call should be "\$2.00 within city limits and \$3.00 where distance outside city limits [is] not more than a mile . . ." The question is fee-splitting, a policy supported by several advocates, was vehemently denounced by Doctor A. K. West in 1905.²³

Ethics, professional and business, concerned the Oklahoma physicians. Many irregular or quack practitioners competed in Oklahoma

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County. The local newspapers carried many advertisements from both the quack and regular physicians. Advertisements in one paper ranged from innocuous business cards, such as that of OCMS member Doctor L. H. Buxton:

DR. BUXTON SPECIALIST
EYE, EAR
NOSE AND THROAT

to Dr. J. C. Mehl's exaggerated promise of cures for an astounding array of ills:

DR. MEHL NEVER DISAPPOINTS
PATIENTS

He Fulfills Every Promise and Never Holds out False Hopes.

He Cures All Pelvic Diseases of Men.

I Cure Stricture Without the Knife or Bougie

I Cure Contagious Blood Poison, Never to Return

I Cure Piles Without Operation, Injection or Ligatures

I Cure Loss of Manly Vigor; No Stimulant, but Permanent

I Cure Varicocele Without Operation and No Loss of Time

I Cure Rupture Without Operation, Trusses, Braces and No Detention From Business . . .²⁴

The opponents of flagrant newspaper advertisements expressed themselves in various terms. Doctor A. L. Blesh declaimed metaphorically: "We have got to find a better way out than this or we had better all smother in the mephitic vapors of the foul Stygian pool together."²⁵ Doctor A. K. West remarked that this practice was a violation of good taste rather than of ethics.²⁶ A motion prevailed at the December 8, 1904 Society meeting, that the Board of Censors act as a committee to examine and report on advertising in public places.

The Board of Censors, composed of three physicians with staggered terms up to three years, was an important committee of the OCMS. The credentials of each applicant for membership were investigated, and several Oklahoma City physicians were refused membership during 1904-1905. However, the minutes do not reveal the reasons for denying membership to some doctors, who were licensed in the territory and apparently were graduated from AMA-approved medical

schools. The censors also made recommendations for disciplinary action. An example was a charge preferred by Doctor W. T. Salmon against Doctor H. H. Wynne of "unprofessional conduct." Both were specialists in eye, ear, nose and throat disorders. While the specifics behind the charge are lacking, possibly it was occasioned by the frequent newspaper reports which mentioned Dr. Wynne's vast international experience and numerous degrees. After prolonged investigation the censors recommended that Wynne be suspended, and the members voted the suspension be in effect for six months.

Perhaps, the most important issues considered by the society in these early years concerned medical licensure and quack practitioners. Since the opening of the territory, the statutory requirements for licensure and continuation in the practice of medicine were not strict and there were inadequate penalties for failure to comply. An applicant had merely to be of good moral character, and to present a diploma or an affidavit that he had been issued a diploma by some medical school. Only if the applicant lacked such evidence must he pass a written examination.²⁷ Since this law was vague and weak, enforcement was rarely attempted. In March 1903, however, a more stringent law was enacted, and penalties for non-compliance were specified.²⁸

The OCMS determined to fight against impostors and unqualified holders of worthless diplomas. For several months information was forwarded to the local health board, but the officers and county attorney manifested no disposition to undertake enforcement proceedings. On March 24, 1904, the OCMS met "to formulate plans and decide on the steps necessary for the society to take against the quacks and men illegally registered who are practicing medicine in Okla. City & Territory." E. E. Cowdrick, MD of Enid, the Secretary of the Territorial Board of Health, was not in attendance, probably because Doctor A. K. West and other representatives of the Territorial Medical Association were preparing charges that he issued medical licenses to individuals who were not legally qualified.²⁹ However, present at the meeting were the two other members of the Territorial Board, Doctors E. G. Sharp, an eclectic physician from Guthrie, and B. F. Hamilton, an allopathic physician

from Shawnee. These men advised that, if the local officials failed to take action, the OCMS should send them evidence for submission to the Attorney General, thereby initiating a veritable "war on quacks."³⁰

Those whom the OCMS was attacking did not remain idle. They quickly retaliated with their own organization, impressively titled "The Oklahoma Medical and Surgical Society." The presiding officer, E. G. Brown, and several associates held diplomas from an unnamed British medical school or the recently-closed-down Independent Medical College of Illinois. They claimed to be victims of persecution and intolerance, and that the real reason the OCMS was against them was ". . . bigoted narrow-minded professional jealousy."³¹

The OCMS continued its investigation, and at the April 14, 1904 meeting it was reported that the evidence procured against E. G. Brown of Oklahoma City had been summarized, signed, and forwarded to the Secretary of the Territorial Board of Health. After a few months Brown's newspaper advertisements stopped, and he left the city. Further information about Brown is unavailable. More details are known concerning one of his associates. At the OCMS meeting on April 28, 1904, a letter was read from the Secretary of McGill Medical School stating that S. H. Earl of Oklahoma City had never matriculated there. This letter was forwarded to Dr. Sharp of the Board of Health, and Dr. Sylvester H. Earl was forced to return his territorial license which "he had obtained by making a false affidavit as to the school from which he did not graduate."³² Quacks were being forced out of the territory. An editorial predicted earlier in 1904: "The Oklahoma County Medical Society has the matter in hand and a competent committee is now gathering evidence that will make a few, at least, take to the 'tall pines.'"³³

In the Oklahoma Territorial Association, the OCMS and its members played significant roles. The May and November 1904 meetings were both held in Oklahoma City where members of the county society acted as hosts. Doctors West, Bradford, and Young headed the committee on arrangements for the May meeting, at which Doctor West was elected OTMA president. The name of the association was changed to the Oklahoma State Medical Association. The association had actually adopted the name Oklahoma Medical Society in 1902, but was frequently referred to as the OTMA

until this time.³⁴ After an address by Dr. J. N. McCormack of Bowling Green, Kentucky, national organizer for the AMA, the society adopted a new constitution and by-laws proposed by the AMA, and made plans for reorganization.³⁵ Dr. W. E. Dicken, an Oklahoma County Society member, became counselor for the first district, and he organized the Cleveland, Canadian, and Pottawatomie Medical Societies. The OCMS was reorganized along AMA lines at its meeting on October 7, 1904. By November, a medical society was formally established in every county in the territory, except for sparsely populated Beaver County.³⁶

The Oklahoma County Medical Society filled a social role by providing a setting where members could relax and get to know each other. Meetings were not without their moments of levity. At the October 12, 1905 meeting, it was noted that "since last meeting the Secretary had held up a bill awaiting the society's advice. Said bill was for 10c, for the placing of a button on the pants of our worthy president lest he bring disgrace on our ranks." In addition to the "sumptuous banquets" following each meeting at society expense, the group planned a dinner "at some suitable place for the Drs. and wives or sweethearts. . . the limit of plates being \$2.00."

The adjacent states, Kansas and Texas, had formed medical associations many years before Oklahoma. Texas had first organized in 1853 and Kansas in 1866. However, Oklahoma caught up rapidly. Kansas and Oklahoma Territories both reorganized along AMA lines in 1904, and Texas just one year earlier.^{37, 38} Oklahoma and the surrounding states faced similar problems of legislation, quackery, and public health. Apparently, the medical societies in Oklahoma were as effective as those in the neighboring states in coping with these problems.

The Oklahoma County Medical Society of 1904-1905 was closely in tune with the aims expressed in the AMA constitution:

. . . of fostering the growth and diffusion of medical knowledge, of promoting friendly intercourse among American physicians, of safeguarding the material interests of the medical profession, of elevating the standard of medical education, of securing the enactment and enforcement of medical laws. . . .³⁹

From its inception the Oklahoma County Medical Society served as a model for other county

societies in the territory. It led the crack-down against quacks. Many members of the society contributed greatly to the community life and later served on the faculties of the medical schools as they were established. As their successors have continued to do, the early members of the Oklahoma County Medical Society played a creditable role in the progress of the city, county, and territory.

ACKNOWLEDGMENTS

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Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

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hypoprothrombinemia and methemoglobinemia); allergic reactions (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); G.I. reactions (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); CNS reactions (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); miscellaneous reactions (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens; diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

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Age: To achieve the maximum rate of seroconversion, measles or combination vaccine should be given when children are 15 months of age. Whenever there is a likely exposure to natural measles at an earlier age, infants as young as six months old should be vaccinated. In such cases, it should be recognized that since the rate of seroconversion declines with diminishing age, the children will need to be revaccinated at age 15 months or older to assure continued protection.



News From The Oklahoma State Department of Health

With the recent shift in age distribution of reported measles cases to older groups, single antigen measles vaccine may be indicated for high school and college age persons in epidemics. Limited data show that adverse reactions to vaccine are no more common in adults than in children.

Revaccination: Children vaccinated before 12 months of age — particularly if vaccine was administered with ISG or measles immune globulin (MIG) — should be revaccinated with live measles or combination vaccine at 15 months of age, to assure full protection. Based on available evidence, there is no reason to systematically revaccinate all children originally vaccinated between 12-14 months of age. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JANUARY 1977

DISEASE	January 1977	January 1976	December 1976	Total To Date 1977	Total To Date 1976
Amebiasis	—	2	1	—	2
Brucellosis	—	—	—	—	—
Chickenpox	153	244	126	153	244
Encephalitis, Infectious	1	—	5	1	—
Gonorrhea (Use Form ODH-228)	1003	1126	1012	1003	1126
Hepatitis, A, B, Unspecified	52	261	96	52	261
Leptospirosis	—	—	1	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	—	4	5	—	4
Meningitis, Aseptic	3	3	5	3	3
Mumps	93	77	100	93	77
Rabies in Animals	19	6	18	19	6
Rheumatic Fever	—	1	1	—	1
Rocky Mountain Spotted Fever	1	—	—	1	—
Rubella	4	13	5	4	13
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	7	109	5	7	109
Salmonellosis	7	9	12	7	9
Shigellosis	3	15	11	3	15
Syphilis, Infectious (Use Form ODH-228)	9	13	4	9	13
Tetanus	—	—	—	—	—
Tuberculosis, New Active	16	25	31	16	25
Tularemia	—	—	1	—	—
Typhoid Fever	—	—	—	—	—
Whooping Cough	1	1	3	1	1

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An Administrator's View of BHS

By R. Anson-Owen
Buckinghamshire, England

May I say first of all that it is a very great pleasure for me to return to the United States. This is my third visit and each time I have found the fervour of life here is as stimulating as it is exacting. I have always enjoyed the natural kindness of Americans, your undiluted pleasure in living, the enthusiasm with which you pursue it and above all your unbounded and unselfish hospitality. For me, every encounter with Americans is a rewarding experience. I am delighted to be back.

Now to work . . . the National Health Service in Britain. I think you are prudent in wanting to know something about it and the three of us are here to help in any way we can. We have seen the operation of this service from three very different vantage points and there may be some overlapping in what we say for we did not clear with each other our draft speeches. There certainly ought to be some contradiction for I must tell you that we come from the county of dissent. It is the County of Buckinghamshire, the birthplace of John Hampden and William Penn; the first took on the King and died for his trouble, and the second called it a day and decided to transfer his activities to the New World. It would therefore be entirely compatible with our background if we on the platform were unable to agree on every single point. What you will get is an honest appraisal of the

situation as we each see it. So much for the warning, now for the history.

The twentieth century has been called the age of humanitarianism. It is precisely because many of us have become sensitive to the needs and aspirations of others that problems have been recognized. In Britain, a health service of some sort existed for many years prior to the establishment of the present service, but between the wars it was of a patchwork variety — a good deal of good intentions, a great deal of inadequacies. It was not until 1943, during the Second World War that the national government of the day decided, as a token of faith in the future, to state that a comprehensive health service for all purposes and for all people would be established. This was part of what has been called "the grand folly" of a moment in the war when there was little likelihood and no certainty that the country would emerge triumphant. Since that day there has been a great deal of controversy about the health service. Let us therefore go back to the basic philosophy of that service. This was that it is cardinal to a proper health organization that a person ought not to be financially deterred from seeking medical assistance at the earliest possible stage. That remains substantially what the health service is about. It was criticised for its organization then and has been ever since.



R. Anson Owen,
Administrator,
High Wycombe Health District,
Buckinghamshire, England

The health service has become a feature of society all too readily taken for granted but the impulse which brought it into being sprang from the observable facts of the day: that for a comparatively wealthy and civilized nation the general standards of health were unacceptably low. When the health service came into effect it was quaintly believed that there was a finite quantity of morbidity within the population which if treated could be reduced. It was expected that if the mass of untreated sick people could be given rapid access to the hospital service the amount of serious illness in the community would diminish and the national health service would become more and more akin to a holding operation. This proved to be totally inaccurate. At no time during the history of the service has the demand on any of the resources available been slack. This is because of a number of factors, none of them peculiar to Britain.

The health service aimed first at treating the diseases of poverty and ignorance, hernias, infectious diseases, poor teeth and so on. But the pattern of medical care soon changed. Since the

advent of antibiotics, infectious diseases are a relatively minor problem. Cardiovascular degeneration still limits the lifespan and there is as yet no fundamental answer to neoplasms or ischemic heart disease. Traffic accidents increase, smoking is an established part of the life of half the nation. Obesity not malnutrition brings its consequences. Drugs, alcohol, stress, environmental pollution, housing conditions, all play their part in modern morbidity. There is also the subjective element of "feeling ill." People nowadays are much more likely to express pain than to hide it behind the stiff upper lip of yesteryear. They are also prepared to bring to the attention of the doctor those conditions which previously might have been embarrassing or associated with stigma: behavioural and mental disorders are accounting for an increasing percentage of workload for society has become much more accepting. It is less eager to pillory the deviant, more eager to understand.

"In Britain a health service of some sort existed many years prior to the establishment of the present service . . ."

The expression "the clinical iceberg" might well have been coined after one of the first epidemiological surveys of the health service when the difference between the statistics of chronic disease and prevalencies recorded in such surveys was sometimes staggering. However, the health service though tending to stagger from crisis to crisis has managed to keep abreast of events by and large. It was rough hewn but it worked and I think it worked as well as could be expected having regard to the time of its birth, the fact that it was in competition in its early days with other reviving needs on the social and industrial front and the financial problems which have beset the country in recent years. It has got by notwithstanding the widening spectrum of medical need mainly because of the enormous advances arising from medical research and from the therapeutic revolution.

Today, about twice as many patients are treated as were treated in 1948 in a smaller number of beds. The turnover is greater, there are more doctors and nurses and the standard of care is high. Judged by the conventional indices the quality of life generally in the last 28 years has been raised considerably. One must pay

tribute here to the doctors and nurses of the service; they have worked immensely hard, sometimes in indifferent conditions, sometimes in appalling conditions to give the best possible service. The only important verdict on the health service is that of the electorate and there is no doubt whatever of that. They have experienced the benefits of the service which with its many imperfections, has been manifestly superior to what went before. Let me make a few more points about what has happened since 1948.

"This (comprehensive health service) was part of what has been called 'the grand folly' . . ."

The hospital was dominant in those days and this had as a consequence a diminution if not a positive down-grading of general practice. The hospital was seen to be in the forefront of medical progress and to be the setting in which any ambitious doctor must pursue his career. Nothing was done to dispel the notion that general practice was the subordinate sector. The proportion of doctors in general practice fell steadily between 1949 and 1971. The hospital during this period was the embodiment of all that was best in medical care and one's own teaching hospital was naturally the centre of the medical universe. General practice was the place for rugged individualists who tackled everything from advanced midwifery to various forms of surgery and whose personalities were at least as powerful as their potions. Things however are changing again. There is a renaissance in general practice and I ought to remind you here that the great bulk of illness is in fact treated by general practitioners and that Britain remains as firmly committed to them as doctors of first contact as it was when the national health service was inaugurated. There are, however, differing opinions about the precise future role of the general practitioner; at one end of the scale many believe that he should remain a generalist whilst, at the other, systems have been advocated whereby such doctors would restrict themselves to dealing with specific age groups or with particular types of disease. Between these two extremes there seems to be emerging an intermediate arrangement under which doctors in group practice can have the opportunity of developing special clinical interests. What has also emerged over the last few

years is the realization that to attempt to divide caring into arbitrary components, into hospital and community or prevention and cure is a futile exercise. The future pattern of need for health services will depend both upon the degree of success in preventing disease from arising and upon the standard of community care provided by general practitioners and community staff.

So far, I have talked to you about the birth of the health service, its development and where it stood prior to reorganization. This reorganization took place in 1974 and it came about for it was felt that as the service had been running for some 25 years it was surely about time it was re-examined, revalued and revamped. The basic principle of reorganization was to bring the original three separate branches of the service together, namely, the hospital, the general practitioner and the local authority. The aim was splendid but the result less than satisfactory. It has produced a plethora of administrators at too many levels, all hardworking worthy men and women but doing work which is duplicating that being done by other administrators in another bureaucratic tier above or below them. The result is increased costs with no benefit to the patient, further and justified hostility from the doctors, turgid lines of communication and immense internal stresses and strains within the bloated bureaucratic machine itself. You might think that nothing worse could have hit the health service but it has.

"... for a comparatively wealthy and civilized nation, the general standards of health were unacceptably low."

The last few years have seen the souring of relations between the government and the medical profession which at one time actually resulted in doctors coming out on strike . . . something that would have been inconceivable in the past; and here we come to what I would regard as the essential ingredients of any discussion relating to the future of medical services in any country. It is now a question of freedom. What we are witnessing in Britain is the medical profession fighting for its integrity and its survival though I fear not all members realise this. Doctors belong to an elite which scarcely recognises those outside it. They have

been in the sun for a long time and this is only meet and right for they have worked very hard but, and I hope they will forgive my saying this, they have not been all that helpful in the past to others trying to get a bit of the sun too. They have a first class professional organization, they have utterly secure employment, excellent insurance cover, they enjoy a high status in society and yet they can be the most insecure of men.

"People nowadays are much more likely to express their pain than to hide it behind the stiff upper lip of yesteryear."

Recent government interference in the service has exacerbated their attitude and this very attitude might well have ensured that the reorganized structure of the service might have been framed in such a way that it did not elevate the status of the doctor. What it undoubtedly has done is to make the doctor less powerful in the processes of decision making. Furthermore, confrontation between the government and the profession has sadly opened fissures within the profession itself so that to be able to maintain a united front becomes increasingly difficult. So you see, the lot of the medical profession in Britain at present is not a happy one.

Various issues have been raised over the past few years. They have been about pay, about status, about facilities, about private beds, about the future of the profession, about the state of the national health service, and about a whole host of matters. What they really have been about is the integrity of the profession.

"Today about twice as many patients are treated as were treated in 1948 in a smaller number of beds."

I think the profession is at the stage when it must either stand out against the predominatingly levelling measures being taken by the state and thus be reborn or it must surrender, not in one dramatic motion, but bit by bit. The issues to some extent have been crystalized in the dispute over private beds. The government of the day is intent on eliminating the private bed from national health service. Hospitals and

legislation have already passed through the House of Commons to this end. Yet it was part of the bargain forged with the profession in 1948 that private beds in national health service hospitals would continue. Now 4,000 private beds are to be phased out though the government has said that it is not against private beds as such and has shown no signs as yet of limiting the number of private hospitals to be registered. But, what, fear members of the medical profession, is the next stage? Is it not likely, they say, that one day we will hear that the government has decided that no private practice of any sort should be carried out? This is an indication of the mistrust that has been engendered over recent years between the government and the profession.

What can be learned from all this? A situation where a noble, learned and honourable profession, such as the medical profession, is at loggerheads with the government is surely to be both deplored and avoided. How could this situation have come about? Is there some single step which the profession has taken which it should not have taken?

"So the British doctor, frustrated, incensed, disappointed in his confrontation with government, the red mist rising before his eyes, does not always see what he is doing to his profession."

The present medio-political affrays tend to obscure more important issues. In the social and technological revolution of the last 30 years, senior professions in Britain have lost more than they have gained. Doctors have been hard hit by inflation and taxation. At the same time, their pleasure in their work has been reduced by the government's failure to recognize the needs of the service. False economies and bureaucratic waste abound and on the dispirited backs of the medical profession is placed the last straw of private beds. The result is a work-to-rule or what is nowadays called industrial action. This means of imposing one's will on authority is well-known. It is used increasingly by dissatisfied groups and therefore it might be regarded as of no great moment when the consultants do it. But it is important for they are professional people of high status.

(Continued on page 110)

Oklahoma State Medical Association

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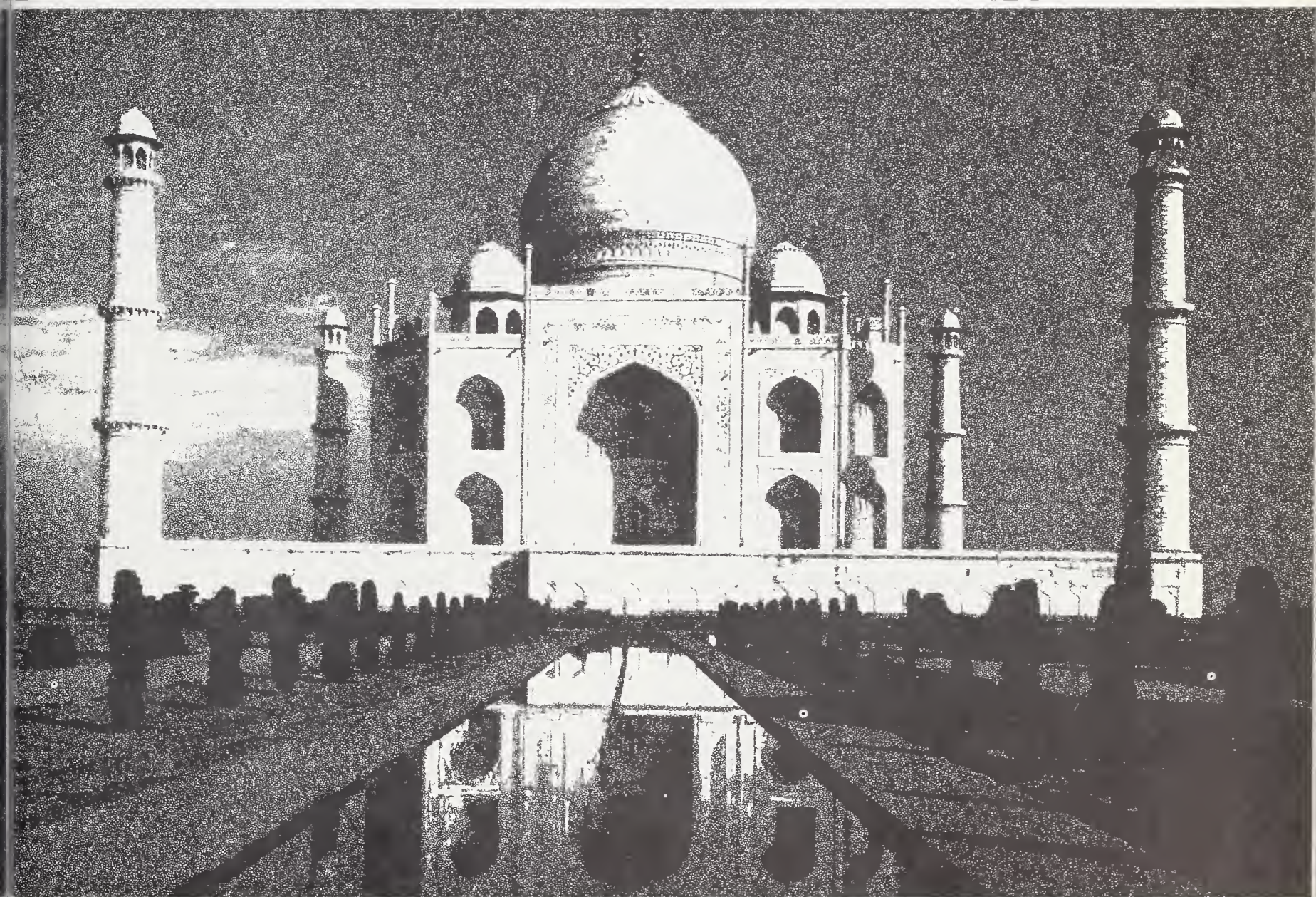
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(Continued from page 108)

A profession exists to serve the public; the doctor exists to serve the patient whose interest therefore comes first. So many doctors have followed this principle for many generations that the profession has universally been held in high regard. Whether its remedies worked or not the public has seen medicine as a vocation, admirable because of the doctor's dedication. As someone once said, most people work so that they can be paid but those with a vocation are paid so that they can work.

So the British doctor, frustrated, incensed, disappointed, in his confrontation with government, the red mist rising before his eyes does not always see what he is doing to his profession. The concept of medicine in recent years has been damaged and everytime the doctor uses methods borrowed from the shop floor the standing of doctors falls a little further.

"They (doctors and nurses) have worked immensely hard, sometimes in indifferent conditions, sometimes in appalling conditions, to give the best possible service."

Now there is not much virtue in dwelling on these matters unless they have significance for you. Is there any danger that you might one day find yourselves in the same position as the British doctor? Not I think as long as you stay out of the employ, direct or otherwise, of government. Furthermore, the attitude of the two governments is very different: I trust that your new Administration, with a judicious mixture of shrewd analysis and vision will not make the mistakes that we have. In my country, loss of pride and changes of fortune have been accompanied by a sharp reduction in confidence. This is seen in the reluctance of businessmen to invest, which is not just a matter of interest rates, but a mark of their lack of confidence in the future. It is apparent in the resistance to change on the part of the trade unions. It is partly responsible for poor industrial relations where old habits of trench warfare persist where there should be a readiness to seek new paths to agreement. What we need in our society is to give the creative elements more scope and less re-

straint, to accord greater respect for achievement. Your new Administration cannot be so crass as to make the same mistakes as we have. You are younger, you have more self-confidence, trench warfare is alien to you. Your new Administration can surely see that the greater good, both for the patient, the profession and the government itself will come from leaving the profession free from restraint, that the future lies in the encouragement of the American tradition of free enterprise, self-reliance and self-responsibility. We, in Britain, have softened the moral fibre of the people by over-indulgence; the Welfare State has been overplayed. We resent being poor but we are not prepared to make the effort to be rich. Do not follow our example.

"Your new Administration can surely see that the greater good . . . will come from leaving the profession free of restraint . . ."

Ladies and gentlemen; do not be misled by the overtures of the government fight against the elimination of the insurance mechanism, oppose the contracting of physicians to government and above all resist having your physicians in the employ of government. Was it not Thomas Payne who said in his essay on Commonsense, "Government even in its best state is but a necessary evil, in its worst state an intolerable one."

I would therefore hope that in your continuing debate on this most important question you should agree at once to fight and fight and fight again for the profession you love. □

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Orby L. Butcher, Jr., MD, Guymon
TULSA

Frank A. Clingan, MD, Tulsa
WASHINGTON-NOWATA

George Kennedy, MD, Bartlesville

Congressional Report Pushes Catastrophic Coverage

A congressional budget office study declares financing of catastrophic medical costs "does not appear to be a serious national problem for the 103 million persons estimated to be covered by major medical insurance."

According to the report, "major medical insurance has improved so significantly over the last five years that persons holding such coverage are adequately protected against high expenses, especially when such costs are associated with a hospital stay."

The report states that "serious coverage problems" exist for both routine and catastrophic expenses incurred by low-income families. An estimated 40 million persons with projected incomes of less than \$10,000 are either uninsured and not eligible for Medicaid or hold individual (non-group) insurance policies. "Coverage under such insurance is generally very poor." And an estimated 5.6 million families with projected 1978 incomes of less than \$10,000 will have out-of-pocket expenses for medical care which exceed 15 percent of their income, the report said.

In addition, a major coverage problem continues in providing protection against the cost of long-term care. "Neither public insurance programs, such as Medicare, nor private insurance plans provide meaningful protection against the cost of long-term care," the report noted. "Mental health services are also frequently excluded from coverage."

The study said even people with otherwise good insurance can experience catastrophically high expenses for these services.

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AMA Insurance Proposal Introduced

Four key lawmakers, representing both major political parties, have introduced into Congress an American Medical Association proposal for national health insurance.

AMA President Richard E. Palmer, MD, urged the 95th Congress and the Carter Administration to consider carefully "this forthright approach to national health insurance. This bill would extend health insurance to every American at a cost the nation could afford. It is a viable solution to the problem of providing quality health and medical care to everyone."

The Comprehensive Health Care Insurance Act of 1977 was introduced into the Senate by Senator Clifford P. Hansen (R-Wyoming) and in the House by Representatives Tim Lee Carter (R-Kentucky), John M. Murphy (D-New York), and John J. Duncan (R-Tennessee).

The medical profession's NHI plan would rely on the structure of the present system of employer-employee group health insurance plans, mandating each employer to provide comprehensive and catastrophic benefit coverage with the employer picking up at least 65 percent of the cost. Employees would not be compelled to participate.

The self-employed as well as the non-employed could purchase qualified private health insurance, through pools if needed, at a cost not more than 125 percent of the cost of group plans. They would have all or part of the premium paid for by the federal government depending upon their income tax liability.

Small businesses that found the mandated plan an added financial burden would receive federal assistance.

Medicare beneficiaries could purchase supplemental insurance to bring Medicare benefits to a par with those offered elsewhere, with the government assisting people with limited resources. Medicaid would, for the most part, be supplanted under the program.

After a certain level of co-insurance was reached, depending upon income, insurance would cover all remaining expenses as a complete protection against catastrophic costs.

The co-insurance factor would deprive no one of needed care, the sponsors said. The absolute maximum that any individual would have to pay would be \$1,500; the absolute maximum for any family would be \$2,000 in any given year.

The AMA's NHI proposal has been the center of controversy for several years . . . 1977 included. At the AMA meeting last December in

Philadelphia this issue was once again the subject of heated debate with the House of Delegates divided down sectional lines. Eventually the eastern forces were able to gain acceptance of the measure, with the help of AMA leadership, and the NHI proposal passed 181-57. ☐

Fraud and Abuse Legislation Goes to Congress

Tightening Medicare-Medicaid fraud provisions is one of the first orders of business before Congress. Legislation has been introduced in House and Senate by key health lawmakers who pledged speedy action.

The bill, sponsored by Senator Herman Talmadge (D-Georgia) and Representatives Paul Rogers (D-Florida) and Dan Rostenkowski (D-Illinois) makes provider fraud a felony rather than a misdemeanor, arms Professional Standards Review Organizations (PSROs) with power to review "Medicaid Mills," requires certain financial disclosures by non-physician providers, and requires PSROs to turn over information to state and federal agencies investigating fraud and abuse as well as health planning agencies.

Representative Rostenkowski, Chairman of the House Ways and Means Subcommittee on Health, said in a House floor speech that "strong efforts must now be made both legislatively and administratively through a renewed commitment to interdepartmental cooperation to bring a sense of morality back into our federal health payment programs."

Representative Rogers, Chairman of the House Commerce Subcommittee on Health, said the honest, hard-working provider suffers from instances of fraud and abuse because his reputation is damaged.

"We have an obligation to all concerned to improve the administration and management of our medical care programs."

The measure was considered by Congress during the last session but time ran out before action could be taken. ☐

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DEATHS

ROSS DEPUTY, MD 1907-1977

A long-time Clinton, Oklahoma, physician and former Oklahoma State Medical Association Trustee, Ross Deputy, died February 5th, 1977. Doctor Deputy was graduated from the University of Oklahoma College of Medicine in 1935. The general surgeon had been quite active in both medical and civic affairs. He had served as President of the Clinton School Board; was Chairman of the Custer County Mental Health Association and in 1971 was named Second Vice-President of the Oklahoma State Health Planning Council. He was a member of the Southwest Surgical Congress and the American Association of Railway Surgeons.

H. NED BURLESON, MD 1903-1977

A Prague physician since 1933, H. Ned Burleson, MD, died February 21st, 1977. Doctor Burleson was born in Wortham, Texas, and was graduated from the University of Oklahoma College of Medicine in 1931. He was an active member of the Oklahoma State Medical Association, having served as a Councilor and also as an Alternate Delegate to the American Medical Association. In 1974, Doctor Burleson was honored with the presentation of a Life Membership from the OSMA.

LEONARD C. WILLIAMS, MD 1897-1977

Leonard C. Williams, MD, 80, retired Oklahoma City surgeon, died in Ardmore January 22nd, 1977. Born in Cleveland, Ohio, Doctor Williams was graduated from the University of Oklahoma College of Medicine in 1920. He was a Fellow of the International College of Surgeons and of the American College of Abdominal Surgeons.

PAUL A. REED, MD 1914-1977

Former Commander of Reynolds Army Hospital, Ft. Sill, Oklahoma, Paul A. Reed, MD, died in Houston, Texas, February 7th, 1977. Recently, Doctor Reed had been practicing in Oklahoma City. A 1939 graduate of the State University of Iowa College of Medicine, Doctor Reed entered the military service in 1941 and retired from the Army in 1967. Since that time he had served as Administrative Assistant for Medical Service to the Director of the Oklahoma Department of Institutions, Social and Rehabilitative Services.

He was a member of the American College of Surgeons, the Southern Medical Association and the Alpha Omega Alpha.

VIRGINIA O. CURTIN, MD 1913-1977

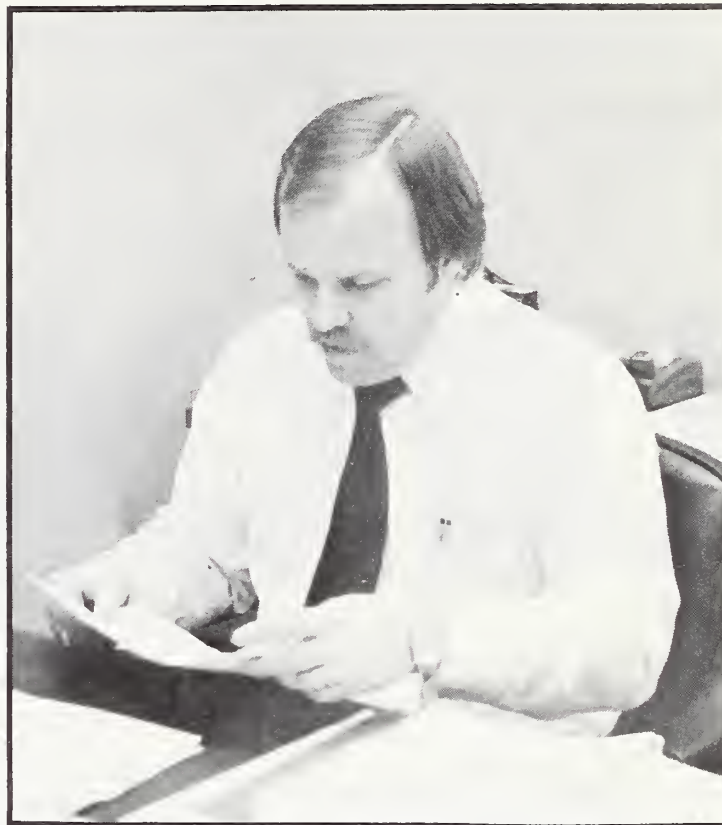
Virginia O. Curtin MD, Watonga physician for 35 years, died February 5th, 1977, in Tulsa. A graduate of the University of Oklahoma College of Medicine in 1936, Doctor Curtin was a co-founder of the Watonga Clinic in 1938. She retired from general practice in 1974. Doctor Curtin and her late husband, Gerald T. Curtin, were publishers of the *Watonga Republican* for 23 years.

CLARENCE B. SULLIVAN, MD 1897-1977

A southwest Oklahoma physician for 52 years, Clarence B. Sullivan, MD, died in Tulsa, Oklahoma, February 17th, 1977. Doctor Sullivan was graduated from the University of Oklahoma College of Medicine in 1922. He had practiced in Oklahoma City, Colony, Cordell and Carnegie before his retirement four years ago. He was a member of the Southern Medical Association.

In 1968, the Oklahoma State Medical Association honored Doctor Sullivan with the presentation of a Life Membership in recognition of his long years of devoted service to his profession and humanity. □

OSMA NAMES TWO NEW EXECUTIVES



New OSMA employees are Lyle Kelsey (l) and Rick Ernest (r). Kelsey holds a bachelor of science degree in business management from Oklahoma Christian College and is currently working toward a masters in business administration with a minor in health administration at Central State University. He was previously employed by Blue Cross/Blue Shield as a hospital and professional relations representative. Kelsey is the new OSMA Director of Governmental Affairs.

Ernest, who is the new OSMA Director of Socioeconomic Activities, holds a bachelor of arts degree from the University of Oklahoma. He has served as assistant to the athletic business manager at the University of Oklahoma, and immediately prior to accepting a position with the OSMA, he was Director of Personnel at Norman Municipal Hospital. □

Aetna Clarifies Medicare Reimbursement

"When a physician bills for laboratory tests, the place where the tests were actually performed must be identified on the Request for Medicare Payment form or the physician's statement. If tests are performed in a laboratory setting outside the physician's office, the laboratory must be certified and qualified to perform the tests billed for before reimbursement can be made. The reasonable charge determination will be based on the laboratory's profile screen. An additional amount will be allowed to the physician for collection and handling of the laboratory specimen.

"If you wish further clarification, we urge you to contact our office, or Aetna at Glenbrook Centre, 1140 Northwest 63, Oklahoma City, Oklahoma 73116, (405) 848-7711." □

Alumni Dinner/Dance Planned

The OU Annual Dinner/Dance will be held on May 5th, 6:30 p.m. at the new downtown Sheraton-Century Center Hotel in Oklahoma City. The dinner and festivities are during the annual Oklahoma Medical Summit, and this year no other "official" activities will conflict with the evening.

Reunions are planned for the classes of '27, '32, '37, '42, '52, '57, '62, '67 and '72.

Plan to join your classmates, colleagues and former professors for some good food and warm comradarie while relaxing to the memorable melodies of one of the nation's top "Big Bands," either the Glen Miller or Les Elgart Orchestra.

Tickets are \$25 per couple. You will be receiving reservation forms and further details in the mail soon. Set the evening of May 5th aside today! □

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What Most Opinion Polls Show HOW DO PEOPLE RATE THEIR MEDICAL CARE?

Is there a "crisis" in delivery of medical care in America?

Some critics of American medicine say there is. But patients express a high degree of satisfaction in virtually all polls.

In these studies — none sponsored by the AMA — a clear majority of people respond by saying that they are satisfied with their medical care, that they can find a doctor when they need one, that the costs aren't too burdensome, and that in general the American way of medical care — delivered in large part by the private physician in his office or to his patients in the hospital — works well. Below are excerpts from many studies done in the last six or seven years.

A survey by the Continental Illinois Bank of Chicago, focused not on depositors but on a probability sample of Chicago residents/suburban residents, found that 90 percent of households with at least one person employed had medical insurance. Respondents indicated overall satisfaction with the extent of employer coverages. Six out of ten said their

medical insurance, disability insurance and pension benefits were "adequate." Fifteen percent even thought the employers medical insurance was "more than enough."

A survey by Black Opinion Survey of Washington, D.C., which did a series of ten scientifically conducted telephone surveys among Black Americans, found 70 percent express great satisfaction with their medical care, 25 percent expressed dissatisfaction and 5 percent were undecided.

A Louis Harris study done for Congress in 1973 on our most serious national problems ranked inflation first, health care delivery 15th out of 16.

About seven Americans in every ten say they are "very satisfied" with their personal state of health, according to the University of Michigan's Institute for Social Research.

Roper Reports finds that nearly nine in every ten (86 percent) have a family doctor they can call upon. Better than eight in ten told Roper interviewers they are "very satisfied" or "fairly well satisfied" with both the quality and availability of their medical care. Although a majority believe medical costs are too high, eight in ten report they are "very satisfied" or "well satisfied" with the provisions they have for

meeting their medical expenses. About nine in ten say they have some kind of health insurance.

The U.S. Office of Consumer Affairs' tabulation of consumer complaints ranks medically-related complaints lowest on a list of 20 categories, accounting for about 1 percent of all consumer complaints. Automobile and home repairs head the list.

The Harris Poll respondents ranked medicine's leadership the highest among 16 different professions and institutions. About seven in ten say that leaders in medicine "really know what the people want," while only two in ten believe medical leadership is "out of touch."

Chilton Research Services found doctors at the head of the list of occupations according to trustworthiness. On a scale of one to ten, Chilton's respondents gave doctors a score of 8.2.

A telephone survey by Citicorp, parent company of New York's First National City Bank, found that three out of four in a nationwide sample said the care they get is good to excellent; only one-fifth said it was fair or poor.

A study (about 1973) by the Bureau of Social Science Research, Inc. of the Washington, D.C., metropolitan area shows that six of every seven local residents are at least "pretty satisfied" with their medical care and only one in ten expresses any measurement of discontent. The study was commissioned by and published in the *Washington Post*.

Life Magazine in 1972 found that 68 percent of respondents to a request for write-in cards rated medical treatment for themselves and their family as good to excellent, and only 7 percent said their treatment was poor. Seventy percent said their doctor seems to care about them individually, either "cares a lot" or "cares some," but 30 percent felt their doctor was "just doing a job" or was "indifferent."

Max Parrott, MD, then AMA President, in a speech in Chicago in 1976, offered a Consumer Health Satisfaction Index. Doctor Parrott cited the polls, studies and surveys listed above as clear-cut evidence that the large majority of the American people are reasonably well satisfied with their medical care; that the American medical care system is working reasonably well; that the relatively few weak spots can be corrected without a major restructuring of the entire system. Medical care is available to most

when they need it, and most are satisfied with the care they receive. Most have insurance and are not unduly apprehensive of being able to meet costs of care.

Said Doctor Parrott: "We do not have in this country a universe of people wandering around fruitlessly in search of medical care. Quite the contrary. Two million eight hundred thousand doctor-patient consultations take place every day; 86 percent of the people say, 'Yes, we have a family doctor we can call upon.' Six out of every ten Americans have seen his or her doctor at least once in the last six months; three-quarters of Americans have seen their doctor within the last two years." (Data from a study done by the Roper organization.) □

AMERICAN MEDICAL ASSOCIATION

Schedule of Meetings

ANNUAL CONVENTIONS

1977 June 18-23—San Francisco, Fairmont
1978 June 17-22—St. Louis
1979 June 23-29—New York
1980 June 21-26—Las Vegas
1981 June 13-18—San Francisco

INTERIM SESSIONS—House of Delegates

1977 December 4-7—Chicago, Palmer House
1978 December 2-6—Chicago, Palmer House
1979 December 1-5—Chicago, Marriott Hotel
1980 December 6-10—Chicago, Marriott Hotel
1981 December 5-9—Chicago, Marriott Hotel

WINTER SCIENTIFIC PROGRAMS

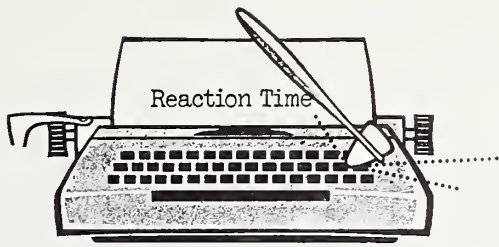
1977 December 10-13—Miami
1978 December 7-10—Las Vegas
1979 January 12-15—San Antonio

1980

Continuing Education Seminars

March 26-27—Detroit, Michigan Inn, Southfield
April 16-17—Rye, New York, Rye Town Hilton
May 14-15—Houston, Shamrock Hotel
Sept. 10-11—Hartford, Sheraton
Sept. 16-18—Lake of the Ozarks, Tan-Tar-A
Sept. 24-25—Chicago, Holiday Inn-Chicago City Centre
Sept. 30-Oct. 2—Hot Springs, Virginia, The Homestead
Oct. 7-9—Huron, Ohio, Sawmill Creek
Oct. 30-Nov. 4—Honolulu, Hawaii
Nov. 18-19—Hershey, Hershey Motor Lodge and Convention Center

For Information: Contact AMA Division of Continuing Medical Studies



Editorial Note: The following letter from L. E. Rader, Director of Institutions, Social and Rehabilitative Services, and a reply from Stephen R. Ryter, MD, Clinical Assistant Professor of Pediatrics, University of Oklahoma Health Sciences Center, were first published in The Journal of the Oklahoma State Medical Association, Vol. 69, No. 12, pg. 530-531. Following the reprint here of Mr. Rader's letter, is a reply from Nelson K. Ordway, MD, Chief of Pediatrics, Department of Health Education and Welfare, Gallup, New Mexico.

Mark R. Johnson, M.D.
Editor-in-Chief
The Journal of the Oklahoma
State Medical Association
601 N.W. Expressway
Oklahoma City, Oklahoma 73118

Dear Doctor Johnson:

In the July 1976 issue of the Journal in the article entitled, "The Well-Baby Visit," there are some statements which are so in error that we feel that a letter of correction is necessary. The Early Periodic Screening, Diagnosis and Treatment program is mandated by Federal law and regulations. The caseworkers do work with the recipients in order that the Department may stay in compliance and continue to receive Federal matching funds. It is possible that patients may not understand why they need to see the physician. However, I think frequently patients after seeing the physician for acute care do not know why they saw him or what the physician intended them to do. I feel that there are problems of communication in all areas. It is true that the Department does not pay for routine well-child care but the early screening program is not a routine well-child program. This program was designed to detect remedial defects at the earliest possible time and to correct such defects. Payment for these services is not made to organized out-patient clinics. Payment is made only to private physi-

cians who do the screening. The attempt is to institute longitudinal care in every instance where it is available. Therefore, many of the statements made concerning screening are invalid. Further, when the private physician makes a referral, if it is found that an appointment has not been made, the worker attempts to help the patient get an appointment with an appropriate physician for care. These are followed up and referral is instituted within sixty days of the time that the recommendation is received in the State Office. Incidentally, the Department experimented with various forms prior to the adoption of this one. The Department included only those things which were stated as specific in the guidelines and left the options for other studies to the individual physician in whom we have enough confidence to do an adequate examination appropriate for the patient's age and any potential problems this patient may have. It is true that many of the physicians who are seeing children on a longitudinal basis as they have for years for recipients of this Department fail to see the need for completing the form. We are in agreement with this opinion and have so written the Department of Health, Education and Welfare, however, the regulations as published still stand.

Very truly yours,
L. E. Rader, Director of Institutions,
Social and Rehabilitative Services

Mark B. Johnson, M.D.
Editor-in-Chief
The Journal of the Oklahoma
State Medical Association
601 N.W. Expressway
Oklahoma City, Oklahoma 73118

Dear Dr. Johnson:

I have read and reread Dr. Ryter's comments on EPSDT in the Journal of the Oklahoma State Medical Association for July 1976, together with Mr. Rader's letter objecting to statements which are in error, and must confess that I cannot appreciate the erroneous statements. Dr. Ryter's comments express the concerns of the private physician who attempts to render satisfactory care to the children seen by him, whether in his office or in an "organized clinic." Mr. Rader as an administrator is concerned with the letter of the law, while Dr. Ryter as a physician is concerned with the

appropriate appraisal of the child. Both would be in reasonable agreement as to the intent of the law. Dr. Ryter shares the frustration of many physicians over the implementation of the law and Mr. Rader has indicated that he has attempted at his level to alleviate some of these frustrations. So where is the argument? The fact that each professional has noted lack of uniformly complete communication between representatives of the other profession and their clients seems to me to be of less importance than the commonality of their concern for child welfare.

Sincerely yours,

Nelson K. Ordway, M.D.
Chief of Pediatrics

BOOK REVIEWS

THE FUTURES OF CHILDREN. By Nicholas Hobbs. San Francisco: Jossey-Bass Publishers. 300 pp. \$12.50.

This book is one of the publications which has resulted from the comprehensive project on classification of exceptional children which was undertaken at the request of the US Department of Health, Education and Welfare. In announcing the project, Secretary Elliot Richardson called attention to a serious national problem: "The inappropriate labeling of children as delinquent, retarded, hyperkinetic, mentally ill, emotionally disturbed and other classifications which has serious consequences for the child . . . there is lacking sufficient dissemination of findings to professionals and the public and nationwide standardization and enforcement of appropriate diagnostic procedures." Secretary Richardson called for a systematic review of the classification and labeling of children and assessment of the consequences that ensue from current policies and procedures and recommendations for improving the practices.

In this book, Hobbs, a renowned psychologist at Vanderbilt University, shows what must be done to guarantee millions of children realistic

opportunities for growth and learning, insure them the services they need and give them constructive experiences in schools, hospitals, courts and most importantly, in their own homes and communities. The book is an action-oriented synthesis of the work of 31 task forces and presents the most up-to-date information on current classification procedures and their implications. Hobbs, as project director, presents nearly 50 readily implemented recommendations resulting from this massive study. This book advances a comprehensive plan for classifying children according to the services they need, rather than the capabilities they lack and it provides the necessary framework for integrating children's services, a task never before attempted. It singles out priority issues for immediate attention and recommends action for new public policy, progressive legislation and better professional practice. This study is obviously extremely important and professionals who are concerned with exceptional children should have it available to them. *Harris D. Riley, Jr., MD*

GASTROENTEROLOGY. Volume One. Third Edition. Edited by Henry L. Bockus, MD 1148 pp., 487 illustrations. Philadelphia: W. B. Saunders Company, 1974. Price: \$35.00.

This is the first of four volumes of the third edition of the well-known text, Gastroenterology edited by Henry L. Bockus. Volume 1 deals with the examination of the patient and various portions of the gastrointestinal tract, specifically the esophagus and the stomach. The initial sections deal in detail with clinical manifestations including physical findings in health and in disease. The sections on the esophagus and stomach each contain reviews in depth of anatomy and physiology of each organ and detailed description of diagnostic procedures as well as chapters on specific diseases involving these organ systems. The morphologic descriptions are brief and are illustrated. The book is current and up-to-date and will be a useful reference for those interested in gastrointestinal disease. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

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Mailgram

Screening for Neonatal Hypothyroidism

JAMES L. MALES, MD

Early treatment of the hypothyroid newborn has long been recognized as the critical step in the prevention of brain damage due to thyroid hormone deficiency. A significant proportion of hypothyroid infants fail to complete normal postnatal central nervous system maturation, and later in their life many will require institutional care. Until recently, the discovery of hypothyroidism in an infant depended upon the clinical skills and the "index of suspicion" of the physicians who examined the baby early in its life. If thyroid hormone treatment is begun early in life, both the individual and society will gain savings in health and in dollars. Advances in the understanding of fetal thyroid system physiology and the improved technology (principally the radioimmunoassay) used in assessing thyroid function should now allow for reliable early detection of hypothyroidism.

The fetal thyroid system begins to function near the 12th week of gestation. By term, this system is functioning independently and operating under negative feedback principles common to several other hypothalamic-pituitary controlled hormonal systems. The placenta is relatively impermeable to maternal thyroid stimulating hormone (TSH) as well as thyroid hormones (thyroxine or T₄; triiodothyronine or T₃). Thus, measurements of the thyroid system hormones in fetal serum reflect the baby's own thyroid economy, as modified by an estrogenic environment.

More than 121,000 newborns have been screened for congenital hypothyroidism by three large study groups on this continent. The incidence of confirmed hypothyroidism ob-

served in these studies was disturbingly high — one in 6,000 births! There were major differences in the methods used to measure thyroid hormones among the three groups (heel-stick filter paper T₄ or TSH vs cord blood T₄ or TSH measured by conventional radioimmunoassay, or by filter paper methods) but the clinical results of all three studies were in good agreement.

A committee of the American Thyroid Association independently reviewed the data of the two Canadian and one American pilot screening programs and, after approval by the membership of the Association, the committee published its report in December 1976.¹ Among the committee's recommendations, the two following seemed the most immediately pertinent: A) more screening programs need to be established and, B) screening for hypothyroidism in the newborn should be combined with existing newborn screening programs.

It would seem reasonable that newborn thyroid screening would eventually be done by some centralized system, *ie*, by some health arm of government, using methods designed for mass screening such as the dried filter paper samples which can be moved easily through the mails. However, until the necessary laws are enacted and a centralized system established, medical centers and hospitals could initiate their own program using cord serum and existing technology to measure thyroid hormones.

REFERENCES

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From the Department of Medicine, Oklahoma City Clinic and Endocrine-Hypertension Section, Department of Medicine, The University of Oklahoma Health Sciences Center

Last May I wrote my first "President's Page." At that time I asked for your help in approaching the problems of the OSMA and our profession, and now I want to thank all of you for your unselfish help, your hard work, your devotion and your dedication. As I write this last "President's Page," I am very grateful to all of you for your help. Not one physician refused to assume a chore or duty, and the work turned out by the association has really been phenomenal. My predecessor, Doctor Arnold G. Nelson, had the vision to outline a reorganization program for our association. This past year that reorganization plan has been implemented, and the new council structure is really beginning to work. Each of the councils has been busy in planning and conducting new programs this year, and their activities have been of real benefit to each and every one of us.



The association's offices have also been reorganized. David Bickham is now our Executive Director, and he is doing an excellent job. Richard Hess is our Associate Executive Director, and he is performing yeoman's service. We have also added two other young executives . . . Lyle Kelsey and Rick Ernest, and both are showing real promise.

As a part of the reorganization, the Executive Committee has developed definite job assignments for each of our executives, and now each of them can develop his own field of expertise. We also have new personnel policies, and the moral of our entire staff is excellent. The offices have undergone renovation, and the space is more efficiently assigned. Today, the Oklahoma Foundation for Peer Review is also housed in the OSMA building.

Each council has worked hard on its program this year, and we have progressed in the direction of a coordinated plan which will benefit

each member of our association. There is one problem, however, that transcends each of the councils, and which is a concern to our Grievance Committee, and in fact to our entire association. This problem is how to deal with the few physicians whose conduct, both professionally and privately, is an embarrassment to the entire medical profession.

For many years each president of the association has been frustrated to find the OSMA unable to deal effectively with those few physicians whose activities detract from the dedication shown by most of us. I personally have been both frustrated and embarrassed because I feel our responsibility to our patients includes the capability of dealing with this problem.

One of our major projects during the past year has been to devise a program to meet this need. Ed Kelsay, who is a former executive on the OSMA staff and an excellent attorney, has helped immensely by researching the Oklahoma law and by contacting other associations concerning this program. As a result of a lot of hard work, a comprehensive plan to address the problems of medical discipline within our association will be presented to the Board of Trustees and to the House of Delegates at our annual meeting in May.

We have laid a lot of groundwork during the past year, and we have developed a system through which this association can excel. The delegates, the trustees, the council chairmen, the council members and the staff have played an important role in leading our association during the past 12 months, as has our President-Elect, Doctor C. S. "Burr" Lewis, Jr.

Burr is well educated in the affairs of our association, and he is a hard worker and a decisive leader. He will be an excellent president for the OSMA, and he deserves the same support and dedication that you have shown me during the past year. I, too, pledge my support to Burr, and I wish him the same rewards and gratification that I have known through my experience as your president.

It's been a tremendous year for me, and I extend my thanks to each and everyone of you for your support and for the opportunity to serve you as your president. □

Orange W. Wilborn

Symptomless Recurrent Hematuria

STAN DeFEHR, MD

A significant number of people who present with hematuria can be categorized as a group who experience recurrent, symptomless hematuria, and who have an excellent prognosis.

Symptomless hematuria is a difficult and trying diagnostic problem. This review was undertaken in order to arrive at a logical, systematic approach to the problem of the diagnosis and prognosis of the syndrome called recurrent non-symptomatic hematuria.

DEFINITION AND DESCRIPTION

This entity has been given a myriad of names, *ie* essential hematuria, focal nephritis, benign hematuria, primary hematuria, recurrent hematuria, recurrent macroscopic hematuria, benign recurrent, benign familial, asymptomatic hematuria, and simply idiopathic, undiagnosed, or hematuria of unknown cause. I have chosen the term symptomless recurrent hematuria to describe the syndrome characterized by (1) hematuria (intermittently gross or microscopic, or persistently

microscopic), (2) normal renal function tests, and (3) lack of abnormal signs, symptoms, or associated systemic illness to account for the hematuria. The condition is noted predominantly in children, with males being affected twice as often as females. Hematuria often follows an upper respiratory infection of non-streptococcal origin and may occur after exercise or exertion. Most patients pursue a benign course. On occasion, however, evidence of progression to renal insufficiency has been noted.

GENERAL EVALUATION OF HEMATURIA

The diagnosis of symptomless recurrent hematuria is one of exclusion. Therefore, before discussing the topic of symptomless hematuria, a brief differential diagnosis of hematuria is needed.

When presented with a patient with a chief complaint of hematuria, the differential diagnosis varies considerably with age, sex, and associated illnesses. (See Tables 1, 2, and 3)

The most important, and first step in determining the cause of hematuria is the taking of a detailed history including the following:

History^{3, 4, 5}

Time of onset of hematuria and recurrences. Any relationship to time of day? Posture? Exercise? Upper respiratory infection?

Duration of episodes

- Character of bleeding
 - Clots (usually bladder)
 - Initial (urethral)
 - Terminal (posterior urethra, prostate, bladder neck)
 - During urination
 - Unrelated to micturition (distal urethra)
- Quantity of bleeding
 - Massive (bladder neoplasm, benign prostatic hyperplasia, trauma)
- Color of urine
 - Red (recent)
 - Brown and muddy (old blood)
- Pain
 - Chronic, dysuria
- Painless (20% of cases of painless hematuria are from neoplasms)⁴
- Relation to injury, infections, drugs (anti-coagulants, salicylates), hemorrhage from other sites, history of renal disease, elevated blood pressure, family history of renal disease, deafness (Alport's hereditary nephritis).
- Other systemic illnesses such as lupus, hemophilia, endocarditis, anaphylactoid purpura, and leukemia.

Table 2. Hematuria in Children⁶

- Acute post streptococcal glomerulonephritis (by far most common, 65% in some series)
- Immunologic disorders
 - primary persistent glomerulonephritis (also known as chronic or subacute glomerulonephritis)
 - anaphylactoid purpura (Henoch-Schönlein)
 - collagen vascular diseases (especially lupus erythematosus)
 - Goodpasture's syndrome
 - subacute bacterial endocarditis
 - hypocomplementemic glomerulonephritis
- Urinary tract infections
 - (30% of renal tuberculosis presents with hematuria)
- Congenital disorders
 - adult polycystic kidney disease
 - Alport's hereditary nephritis (nephritis, nerve deafness, ocular lesion)
 - congenital anomalies
- Hemorrhagic disorders
 - sickle cell trait
 - thrombocytopenia
- Neoplasm (usually none or minimal proteinuria)
 - most common bleeding tumor is Wilm's
- Drugs and chemicals—especially chemotherapeutic agents
- Miscellaneous
 - abdominal trauma
 - hemolytic-uremic syndrome
 - emotional hematuria (with overexcitement, overexertion)
 - allergic hematuria (usually food allergy)
 - self instrumentation or foreign body
- Recurrent non-symptomatic hematuria

Table 1. Neonatal Hematuria

- Congenital abnormalities
 - dysplasia or agenesis (oligohydramnios)
 - obstructive uropathy (bilateral renal masses with ascites)
 - infantile polycystic disease (autosomal recessive, early renal failure)
- Vascular anomalies
 - renal vein thrombosis
 - renal artery thrombosis (severely elevated blood pressure, heart failure)
 - cortical necrosis (secondary to shock)
- Tumors
 - Wilm's (most common)
- Hemorrhagic disorders
 - Vitamin K deficiency
 - thrombocytopenia
- Nephrotic syndrome
 - Rule out extrarenal causes of bleeding such as:
 - swallowed maternal blood
 - estrogen withdrawal in a female infant
 - red diaper syndrome due to either urate crystals or *Serratia marcescens*

Table 3. Hematuria in Adults^{4, 5}

Although Table 2 provides a more complete listing, the following are the more common causes of gross hematuria in adults. The percentages listed were taken from Kudish's⁵ survey of 1,000 patients presenting with gross hematuria. (An interesting comparison of causes is available from Burkholder's⁷ series of 237 patients presenting to Brooke General Army Hospital with chief complaint of hematuria.)

Approximately 70% of the hematuria in adults is due to lesions found in the lower and midurinary tracts.

Bladder (40%)

Cystitis (22%)

Tumor (15%)

Stones, varices, diverticula, trauma, foreign bodies, chemicals, irradiation.

Prostate (24%)

Benign prostatic hyperplasia (12.5%)

Varices, prostatitis, vesiculitis, stones, urethral stricture, calculus

Kidney (15%)

Tumor, pyelonephritis, calculus, trauma, hydronephrosis, cysts, renal artery lesions.

Ureter (6%)

Calculus (5%)

Essential (8.5%)

Extragenitourinary

Pelvic and rectal malignancies

Endometriosis

Periurethritis

Systemic causes

Hemophilia

Purpura

Polycythemia

Leukemia

Approximately 5-10% of the people admitted for evaluation of hematuria in the United States² or Britain are designated unexplained hematuria, or hematuria of unknown cause.

Physical:

The physical examination should be complete, with special emphasis placed on the pelvic examination in women to rule out bleeding from the vagina or rectum. The costovertebral angle areas, abdomen, suprapubic area, and prostate should also be examined carefully. The extremities should be noted for edema.

It should be remembered that not all red urine represents hematuria.⁴ Red or dark urine can be produced by ingestion of certain foods (food coloring, beets), drugs (pyridium, nitrofurantoin) or other substances which accumulate abnormally as metabolites (myoglobin, hemoglobin, porphyrins, or conjugated bilirubin). Therefore, one must look for red blood cells, and/or red cell casts in a freshly voided urine specimen. Red blood cell casts are an im-

portant finding since they localize the bleeding to the kidney itself. Also, it is essential to perform a Hemastix test for hemoglobin in the urine, as red blood cells may hemolyze and therefore not be seen under the microscope.

The actual color of the urine will be determined by two parameters: (1) the amount of blood present, and (2) the pH of the urine. An acid urine will appear more "smokey" whereas a more alkaline urine will be red.

SYMPTOMLESS RECURRENT HEMATURIA

Much has been written about symptomless recurrent hematuria, with articles dating back to the early 1900's. Volhard and Fahr¹ in 1914 in Germany described the syndrome and postulated the lesion as a "focal nephritis." This idea is still prominent today. In 1926, Baehr⁷ described this disease in an article entitled "a benign and curable form of hemorrhagic nephritis." He states, "In contradistinction to the well known type of acute hemorrhagic nephritis, there occurs a benign form with which most physicians are as yet unacquainted."

CLINICAL MANIFESTATIONS

Symptomless recurrent hematuria has been described predominantly in *children*, and pediatric journals and textbooks are ready sources of information about this subject. Only a few of the articles reviewed for this paper dealt exclusively with adults.^{2, 7, 11, 13, 25}

Numerous studies have also shown a predilection for *males* by approximately a 2:1 ratio, and no explanation has been afforded for this fact.

The syndrome presents as recurrent gross or microscopic hematuria unaccompanied by any known disease process which would account for the bleeding. The bleeding episodes are separated by widely varying lengths of time, from a matter of days to years. The hematuria is often preceded by an upper respiratory infection^{8, 9, 12, 13, 14}, presumably viral in origin, and the infection precedes the hematuria by only one to three days, helping to differentiate it from the acute post-streptococcal glomerulonephritis which has a latency period of around two weeks. It is also noted following

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exercise^{8, 10}, late in the evening after exertion, following tonsillectomy¹⁴, dental extraction¹⁴, typhoid inoculation¹⁴, and with fever⁹. Bodian⁹ stated that there seemed to be two typical types of history:

1. After exercising through the day, hematuria would appear in the evening and be clear by morning.

2. Hematuria following an upper respiratory infection.

During the episodes of hematuria, the majority of patients are without symptoms, but a few may complain of vague abdominal discomfort or myalgia.

Another controversial clinical aspect of this disease is the reported *familial* incidence. Some authors deny any familial tendency^{8, 13}, while others^{12, 15, 16, 17}, especially McConville¹⁶ and Marks¹⁷, advocate both a familial and non-familial "benign" recurrent hematuria. McConville showed 50% of his 17 patients to have a family history by screening the patient's families with Hemastix twice daily for one week. He concluded that the familial disease was inherited autosomally dominant, while the nonfamilial recurrent hematuria was a heterogeneous group of differing etiologies. Marks later felt he demonstrated by renal biopsy that the nonfamilial hematuria was characterized by focal, segmental glomerulonephritis, whereas the familial type showed no abnormalities by light microscopy. The familial nature of the disease, however, is still controversial.

Physical examination of these patients reveals a normal blood pressure, no edema, and no nerve deafness (to differentiate it from Alport's syndrome).

LABORATORY FINDINGS

The laboratory findings are normal except for the persistent or intermittent finding of greater than 5RBCs/HPF in the urine. Approximately one-half of the patients also have proteinuria in amounts usually less than 1.0 gram/24 hours,^{10-14, 18, 19-21} however, the amount of proteinuria is quite variable (from none to 3.0 grams/24 hours). Studies correlating the prognosis with the amount of proteinuria have been reported^{10, 19, 21} but results have been controversial.

There is characteristically no pyuria, no aminoaciduria, no bacteriuria, and urine cul-

tures are sterile. Renal function tests including BUN, creatinine, and creatinine clearance are all within normal limits. ASO titers are not elevated, ESR is normal, throat cultures are negative for pathogens, and B^{1c} complement levels are not depressed. The findings on intravenous pyelogram, cystoscopy, and cystourethrography are all normal.

RENAL BIOPSY

Renal biopsy has been the main route of investigation of the cause and prognosis of recurrent hematuria during the last two decades. It is divided into findings after studies with light microscopy, electron microscopy, and immunofluorescence.

LIGHT MICROSCOPY

"Focal glomerulonephritis" has been used synonymously with recurrent non-symptomatic hematuria by many physicians since Volhard and Fahr¹ first postulated the lesion in this disease as "focal nephritis" in 1914. The following terms are commonly used to describe the distribution of glomerular lesions.

1. Generalized—almost all glomeruli involved.

2. Focal—only some of the glomeruli affected.

3. Diffuse—lesions extended throughout the entire, or almost entire, glomerulus

4. Segmental or local—only one or more areas or loops of a glomerulus affected.

All of the studies reviewed concur that the major histologic changes noted on renal biopsy were ones of either no abnormality, minimal abnormality, or focal segmental glomerulonephritis. Repoort¹³ states, "In all cases, most glomeruli seen in renal biopsies were normal. When lesions were observed, a focal, usually segmental proliferative glomerulonephritis predominated." These histological diagnoses accounted for approximately 85% of the biopsies done. Other diagnoses included segmental glomerulosclerosis, chronic diffuse glomerulonephritis, mesangial proliferative glomerulonephritis, generalized glomerulonephritis, chronic pyelonephritis, and active proliferative glomerulonephritis. Almost uniformly, the authors of these studies made statements tying these more severe histological changes to increased proteinuria and an allegedly worse prognosis.

Table 4. Light Microscopic Findings

	No Abnormality	Focal Segmental Glomer- ulonephritis	Diffuse Glomer- ulonephritis	Other more severe lesions
Repaport ¹³ 33 patients aged 14-64 with nonsymptomatic hematuria (32 biopsies)	4	28		
Glasgow ¹⁹ 45 children	17	20	*8	
Alexander ²⁵ 20 patients	4	12	1	**3

*These 8 patients had more persistent proteinuria, a higher frequency of preceding upper respiratory infections, and more evidence of a streptococcal infection preceding the initial bout of hematuria. Glasgow postulated that these patients had an atypical post streptococcal glomerulonephritis which could be distinguished by renal biopsy.

**2 membranoproliferative glomerulonephritis

1 acute diffuse proliferative glomerulonephritis

A few authors who have studied the light-microscopic findings of this syndrome extensively, have divided biopsy findings down into categories of anatomic alterations (Repaport¹³, Glasgow¹⁹, Alexander²⁵) but their findings are difficult to compare. Glasgow commented on this heterogeneity of histology and histological terms, and stated: "This may be partly due to the subjective nature of histological interpretation and lack of uniform nomenclature; the manner in which pathological terms may be appraised is only on references to illustrations accompanying their articles." These three studies are compared in Table 4.

IMMUNOFLUORESCENCE

Immunofluorescent studies have drawn much interest over the last several years in both (1) patients with focal glomerulonephritis of any etiology, and (2) those patients with the syndrome of recurrent nonsymptomatic hematuria regardless of biopsy results by light microscopy.

Bodian⁹, in 1965, commented that in his series of patients with recurrent hematuria, those found to have focal, local, glomerulonephritis on biopsy, also revealed a diffuse fluorescence in the glomerulus when tested against gammaglobulin. Both Roy¹⁰ and Strauss²² also found diffuse mesangial deposition of IgG, IgA, and C₃ in their two series of children with focal, local glomerulonephritis. A negative immunofluorescence, without histologic changes was recorded by Marks in his patients. Bodian⁹ postulated that there was diffuse immunopathologic damage, either hyper-

sensitivity or autoimmune, but only a localized histologic reaction to it.

Heptinstall¹⁴ states that "not all cases of focal glomerulonephritis show a widespread involvement of the glomerulus with immunoglobulin, and in some instances there is just a focal and local deposition of immunoglobulin." Bodian⁹ comments on this fact by saying that a negative immunofluorescence may mean inactivity or remission of the disease, or when it becomes chronic it may progress by a different pathway from the antigen-antibody process.

Besides the work with immunoglobulins as a general class there has been much study recently on the findings of IgA specifically in the glomerulus. Berger and Hinglais³⁰ pioneered this work when in 1968 they reported a series of 25 patients who exhibited on immunofluorescence a strong presence of IgA in the mesangium of the glomeruli, with less intensity of IgG and C₃. Most of these cases had revealed a focal, local glomerulonephritis by light microscopy. The next year, 1969, Berger²⁹ published another article wherein he reported having observed mesangial deposition of IgA, IgG, and C₃ in 55 patients who had no systemic disease or history of glomerulonephritis, but of these 55, 22 had recurrent hematuria. This study led Berger to state that, "Most cases diagnosed with microscopy as chronic focal glomerulonephritis belong in fact to this (IgA-IgG nephropathy) entity."

Lowance²⁷ and McEnery¹⁸ have since shown comparable results, but disagree with Berger's statement that the finding of IgA is good evidence of focal glomerulonephritis and recurrent hematuria. Hyman²⁸ biopsied 470 patients with various glomerulonephropathies for study of patterns and frequency of glomerular bound IgA, whereas 33% of the other glomerulonephropathies were also positive. Hyman reflects most other authors' views (Lowance²², McEnery¹⁸, Heptinstall¹⁴, and Roy¹⁰ when he states, "Whether IgA-IgG nephropathy (Berger's disease) can or should be singled out as a distinct entity is questionable on the grounds that immunofluorescence and light-microscopic glomerular alteration, as well as presumably etiologic and pathogenic mechanisms are mimicked more frequently by a variety of other well characterized glomerular diseases." He goes on to state that the demonstration of IgA in the glomerulus is of little practical value in the differential diagnosis of similar appearing glomerular lesions.

The immunofluorescent studies describing mesangial without glomerular deposition have resulted in several hypotheses concerning etiology of the lesion. Heptinstall¹⁴ felt the immunofluorescent distribution could be interpreted several ways.

(1) It may show the potential diffuse nature of the disease.

(2) It could indicate that the deposits in the mesangium were taken up by the mesangium selectively, and that here they are innocuous and incapable of eliciting much of a reaction. Roy¹⁰ says there is experimental evidence suggesting that the mesangial cell system is important in removing macromolecules from the circulation. From this, he further postulates:

(3) An antigen in the mesangium.

(4) A nonspecific deposition due to injury mediated by another mechanism,

(5) The association of recurrent nonsymptomatic hematuria with upper respiratory infection and IgA deposits possibly suggests a casual relationship with mucosal infections.

(6) An alternative pathway of complement activation at the C3 step by IgA. Lowance²⁷ states that the IgA is probably a meaningful participant in the glomerular lesion and not just a passive phenomenon. More about the pathogenesis of this disease will be revealed through future immunofluorescent studies.

CLINICOPATHOLOGICAL CORRELATION AND PROGNOSIS

Authors of studies concerning both children and adults with the syndrome of recurrent hematuria uniformly agree that the prognosis, at least short term, is very good. Follow-up has varied from 0 to 31 years¹⁹.

Labovitz¹¹ followed his 21 adult patients for periods of 2 to 10 years without evidence of disease progression. He stated, "The short term prognosis is excellent for adults with hematuria, minimal proteinuria, and idiopathic focal, glomerulonephritis, who have a normal blood pressure and normal renal function."

However, most sources also agree with Arneil⁸ when he says that, "It is obviously wrong to be too dogmatic about the 'benign' nature of this condition. Recurrent hematuria probably does not constitute a distinct type of glomerulopathy."

Researchers have searched diligently^{2, 7, 11, 13, 20} to separate different clinical, laboratory, and pathological parameters that would enable them to predict a particular patient's prognosis. There has been only limited and controversial success in this endeavor.

AGE

Few articles on this syndrome focus predominantly on adults. In those articles reviewed, there seemed to be no correlation between age of onset and prognosis. Heptinstall¹⁴ does make the statement that this condition is found more often in children, and more rarely in persons over 40, but makes no statement as to differences in prognosis between the age groups. It should be borne in mind that the older the person presenting with microscopic hematuria, the more likely a significant diagnosis will be made other than "essential hematuria."

The term "focal glomerulonephritis" as a synonym for recurrent nonsymptomatic hematuria has come under much criticism, and is inaccurate at best. Focal nephritis itself^{20, 23} is a disease process of unknown etiology, presumably the end result of many different renal insults according to Repoport¹³. Many known pathological states may be associated with focal glomerulonephritis on biopsy; these are listed briefly below.

(1) non-streptococcal glomerulonephritis of presumed viral origin

(2) convalescent post-streptococcal glomerulonephritis

(3) Alport's hereditary nephritis (focal nephritis is the earliest lesion, followed by the classic lesion of foamy, lipid-filled histiocytes)

(4) lesions from subacute bacterial endocarditis

(5) Henoch-Schönlein anaphylactoid purpura

(6) Goodpasture's syndrome

(7) Systemic lupus' earliest lesion of lupus nephritis

(8) Polyarteritis nodosa

(9) Hypersensitivity angitis

These diseases must be taken into consideration whenever a biopsy is interpreted as showing focal glomerulonephritis, therefore, it is best to discourage the use of the term "focal nephritis" as a synonym for asymptomatic recurrent hematuria.

ELECTRON MICROSCOPY^{15, 22, 25, 26}

The use of electron microscopy in the evaluation of renal biopsies in patients with asymptomatic recurrent hematuria has not added much information to that obtained with light microscopy alone. Singer¹⁵ showed electron-dense deposits on both the endothelial and epithelial sides of the basement membrane in 11 of 31 patients; 5 of the 11 had shown no abnormalities by light microscopy. He felt these "humps" of electron-dense material may indicate a subclinical glomerulonephritis.

Alexander²⁵, in his 1973 article describing 20 patients with benign recurrent hematuria provides what is perhaps the most detailed description of electron microscopic findings. The major ultrastructural changes he noted were:

(1) Irregularity in thickness and density of the glomerular basement membrane with apparent discontinuity and multi-laminar splitting of the lamina densa. (A developmental defect allowing leakage of red blood cells?)

(2) Varying degrees of foot process fusion.

(3) Granular deposits related to the glomerular basement membrane like those reported by Singer (antigen-antibody complex deposition?)

(4) Often numerous densities found in the mesangial basement membrane (also reported in 70% of patients by Strauss²²).

(5) Also, changes consistent with acute diffuse proliferative glomerulonephritis and membranoproliferative glomerulonephritis were seen in three patients.

AMOUNT OF HEMATURIA

The only study relating prognosis to the amount and the duration of hematuria is by Johnston²¹ in his five year follow-up of Bodian's⁹ patients. He found that one-half of these patients had persistent hematuria after five years, while the other one-half had developed normal urines. The patients in which hematuria had persisted were noted to have more abnormalities by renal biopsy at the onset. It is also interesting that Greene³¹, in a study of 500 patients presenting to Mayo's Clinic with chief complaint of asymptomatic microhematuria, draws the conclusion that as long as the hematuria is microscopic, the number of RBCs/HPF made no difference as to the percentage that were found to have a significant urinary tract lesion. Patients presenting with gross hematuria, however, did have a higher incidence of significant lesions.

The amount of proteinuria has also been studied extensively in relation to prognosis. And there is much disagreement over whether or not this parameter may be an indicator of severity of disease.

Roy¹⁰, in his study of 16 patients, nine of whom had proteinuria, felt that proteinuria was found to correlate to a degree with the development of renal insufficiency, but admitted this was not an absolute correlation. Alexander²⁵ also found a general correlation between the degree of proteinuria and severity of the renal lesions, but quickly added that the finding of proteinuria in association with hematuria is not necessarily an indication of severe renal disease.

Johnston²¹, again in his five year follow-up on Bodian's series, found only one-half with persistent hematuria, and added that this group had experienced more proteinuria at the onset. Burkholder² felt albuminuria indicated a worse prognosis, but Labovitz¹¹, in his study of 21 young adults, said it could not be used to prognosticate. Glasgow¹⁹ also stated the amount of proteinuria excreted in the urine had little or no prognostic or diagnostic significance.

Finally, Hendler²⁰ probably sums up the controversy well when he states that even though the only *clinical* feature which correlated well with pathological changes on biopsy was proteinuria in excess of 500 mgm/24 hours, he could *not* use the coexistence of hematuria and proteinuria with confidence in distinguishing severity of disease and eventual prognosis.

GLOMERULAR LESION

There are cases in almost every study reviewed, wherein a case fit clinically all the parameters we have defined as characteristic of recurrent nonsymptomatic hematuria, but which, on biopsy, revealed an active proliferative glomerulonephritis, chronic pyelonephritis, glomerulosclerosis¹⁰, or other lesion more advanced than focal, local glomerulonephritis. Hendler²⁰ stated that these more severe lesions tended to show a worse prognosis on follow-up, with some patients showing progressively worsening lesions on subsequent biopsies, and in a smaller percentage, diminished renal function. Johnston, in his follow-up study of Bodian's patients, noted that the group with hematuria that persisted had more abnormal biopsy results at the time of initial work-up.

The general consensus is that the patients whose kidneys showed more than minimal abnormality, or focal, local glomerulonephritis, in general did have a more severe disease, and a worse prognosis as a group.

Roy¹⁰ and Given⁶ also add the parameter of IgA deposition, and make the statement that a group of these patients with the diagnosis of recurrent nonsymptomatic hematuria who subsequently develop renal insufficiency may be anticipated when the combination of (1) proteinuria, (2) focal glomerulosclerosis¹⁰, and (3) mesangial immunoglobulin deposits are found. Conversely, the best prognosis may be in a patient with no proteinuria, no immunofluorescence, and only minimal abnormality of the glomerulus.

Also, McConville¹⁶ and Marks¹⁷ indicate the need to consider familial incidence in assessing prognosis. Both authors state that a child presenting with all the clinical and laboratory findings of recurrent non-symptomatic hematuria, as well as a family history of recurrent hematuria, has a very good prognosis, and McConville¹⁶ suggests that only a minimal work-up is needed to rule out Alport's hereditary nephritis. On the other hand, the patients without a familial incidence are postulated as a heterogeneous group, and their prognosis is more in question.

HOW EXTENSIVE A WORK-UP?

Undoubtedly the most important, and yet highly controversial question clinically, is "How much of a work-up should the physician do on a patient who presents with an asymptomatic hematuria, either gross or microscopic, either initial or recurrent?"

The literature is dotted with examples of children undergoing multiple cystoscopies, being kept bed-ridden for months at a time, placed on severely restricted diets and various treatment regimens, and finally undergoing surgical exploration so the cause of their recurrent hematuria might be revealed.²⁴ On the other hand, many patients are quite anxious about hematuria, and their fears of cancer or progressive renal disease may be overwhelming. Others are concerned about future plans of marriage, pregnancy, offspring, or problems obtaining life insurance. This question of the extensiveness of the work-up warrants careful consideration.

A review of the pertinent points of the history and physical examination to be developed on a patient presenting with a chief complaint of hematuria was provided earlier. After the thorough history and physical examination, most authors would mandate several carefully selected laboratory tests.

(1) Urinalysis for free RBCs, RBC casts, protein, crystals, specific gravity, and pH. RBC casts are a very important finding since they localize bleeding to the kidney and may eliminate the need to consider further urologic examination.

(2) Urine culture (for tubercle bacilli and other pathogens) and sensitivity (also culture for TB)

(3) CBC with differential and platelet counts

(4) Blood serum survey, if available: BUN; Serum creatinine; Serum electrolytes

(5) 24-hour urine collection for creatinine and protein; Determination of creatinine clearance

(6) Prothrombin and partial thromboplastin time

(7) Throat culture; ASO titer; B^{1c} levels—Especially at first episode of hematuria to rule out a post-streptococcal glomerulonephritis

(8) Hemoglobin electrophoresis in blacks to look for sickle cell disease or trait. Goodwin³² states that the sickle cell trait is sometimes associated with painless hematuria. Unlike sickle cell disease, patients are free of pain and other involvement.

(9) LE prep and ANA if result is uncertain

(10) Possibly urinary-sediment cytology

The above initial laboratory tests may be followed by others as they seem indicated.

SPECIAL STUDIES

A variety of special studies exists which have been employed at various times to investigate the cause of asymptomatic hematuria. The controversy over the extensiveness of the work-up needed focuses on these special studies. The main tests are listed below.

Intravenous pyelogram (IVP) with or without tomograms

Retrograde pyelogram

Urethroscopy and cystoscopy

Renal biopsy

Renal arteriogram

Renal scan

Echograms

Before reviewing the virtues and liabilities of these various tests, the kind of yield to be expected from a work-up of a patient presenting with the sole complaint of asymptomatic microhematuria will be examined. In Greene's³¹ study of 500 patients at the Mayo Clinic, 56% were found to have a urologic lesion after a complete urologic work-up, exclusive of biopsy. Of those lesions, 82% were termed insignificant, (46% of the total 500 patient population). Only 5% of the total group had what was labeled a significant lesion (defined as life-threatening or requiring major treatment) of which 50% (2% overall) were neoplasms. The other 5% were classified as moderately significant lesions (such as a small asymptomatic calculus in the renal pelvis). The chance of finding a significant or moderately significant lesion *did* increase with age, and Greene chose the age of 50 years as the turning point. Benign prostatic hyperplasia and urethritis accounted for approximately 45% of the total 500 patients' causes of hematuria.

Another important point is to examine the urine for red blood cell casts before ordering any special studies. Several authors, including Ferris²⁴ and Labovitz¹¹, make the statement that the finding of RBC casts will preempt much of the urological work-up, especially cystoscopy and urethroscopy.

IVP. Along with a routine chest x-ray and a plain film of the abdomen to look for calculi and check renal size, almost all authorities agree that an intravenous pyelogram should be done, and if no visualization occurs, a retrograde pyelogram should be ordered.

Cystoscopy. Some controversy enters the picture when cystoscopy is considered as Glasgow¹⁹ feels that when the IVP is normal, then cystoscopy has not been useful either. But by far, the consensus appears to be that the use of urethroscopy and cystoscopy, especially during an episode of bleeding, is advisable. Kudish⁵ states, "The most important diagnostic procedure, particularly during periods of gross hematuria, when the source of bleeding cannot be determined by x-ray studies, is cystoscopy." He described infection as the only contraindication.

Biopsy. The most controversial procedure advocated is that of renal biopsy. The literature is almost equally divided on the subject of the advisability of this procedure in patients with asymptomatic hematuria. There may be some tendency to avoid the biopsy in the

younger age groups, while favoring its use in the older aged people, but there are articles pertaining solely to children advocating routine biopsy,^{9, 19} and on the other hand, articles with only adult populations that advise against its general use.^{2, 5}

Burkholder² particularly considers the question of the extent of evaluation and he makes the statement that "renal biopsy does not have significant diagnostic return to warrant routine use in patients with unexplained hematuria. Clinicians must weigh (1) severity of bleeding (2) the likelihood of recovery of significant information; and (3) the possibility of serious complications of the tests." Renal biopsy can have hazards and Lindeman³⁴ reports a 5% incidence of serious post-biopsy bleeding with a 0.3% of patients requiring surgery and possible nephrectomy. Other complications are arteriovenous fistula formation and renal infection.

On the advocate's side of renal biopsy, three rationales are offered.

1. To help determine prognosis

Hindler²⁰ feels strongly about this, and reflects other researchers' opinions^{9, 11, 19, 24, 25} when he says, "Since severe as well as mild renal lesions may present a similar constellation of clinical features, histological confirmation is useful in clinical management." Other authors too, feel that lesions such as membranoproliferative glomerulonephritis, latent glomerulonephritis, chronic glomerulonephritis, and Alport's hereditary nephritis must be ruled out by biopsy, although they also admit that it is rare to have a diagnosis made that is not already suspected, or that will result in a change in the patient's treatment.

2. To reassure the patient and his family

Burkholder,² even though he is against routine biopsy, says that in general, the patients themselves want the biopsies performed. Their fear of cancer or progressive renal disease drives them from one doctor to another having all of these tests repeated to try to alleviate their fears. Glasgow¹⁹ also makes a similar statement about the anxious parents of a child with hematuria.

3. To explain deteriorating renal function and progressive disease

Most authors agree that a biopsy is indicated when follow-up tests show deteriorating renal function and progressive disease.

In view of such varying opinion, there can be no rigid criteria set forth for biopsy indications.

When, after all laboratory, radiological, and urological examinations are completed, and no identifiable cause has been found, the clinician must weigh many factors, such as patient-age, amount of proteinuria, degree of hematuria (gross or microscopic), duration of hematuria, presence or absence of a significant family history, and less objective parameters such as the anxiety of the family or the patient about the hematuria or biopsy procedure itself.

It is perhaps reasonable to recommend renal biopsy for anyone over the age of 30 years presenting with asymptomatic hematuria for the first time when the routine work-up, as outlined earlier, is negative.

No one advocates *routine* use of renal arteriography, echo, or renal scan in the absence of positive findings on the other tests, including urinary-sediment cytology.

FOLLOW-UP

It is generally agreed that a patient with recurrent nonsymptomatic hematuria can be followed with renal function tests (BUN, creatinine, and creatinine clearance) and 24-hour protein determinations alone. A patient should have these tests performed at fairly close intervals (2-3 months) after the first episode of hematuria and work-up, then at intervals of 6-12 months thereafter as long as the hematuria persists. If renal function is seen to deteriorate, biopsy is indicated. Glasgow¹⁹ advocates re-biopsying all patients after several years anyway, to determine if there is any progression of the histologic lesion.

TREATMENT

There has been no proof of efficacy in any of the treatments afforded for patients with this disease. It is generally accepted that prolonged bed rest, special diets, and antibiotics have no effect on the hematuria, and are worthless as treatments. Bodian⁹ does, however, advocate short-term bed rest during severe attacks.

There have been some studies of the use of steroids, especially prednisone, for this disease, but again there has been no good evidence that it is beneficial. Bodian⁹ suggests possibly treating patients with a positive immunofluorescent antibody on biopsy, and McEnery¹⁸ is an advocate of steroid therapy as he felt his patients showed less hematuria, less proteinuria,

and fewer episodes of gross hematuria while on prednisone. However, he studied only four patients. There have been several other studies²¹ which showed no improvement with steroid therapy.

ETIOLOGY

Conjectures about the etiology of this entity are numerous, and since the actual lesion and disease process itself are largely unknown, ideas are difficult to prove or to disprove. A brief list of possible explanations of the pathogenesis was enumerated under the discussion of immunofluorescence, and only a short list of the most popular etiologies offered are listed here.

(1) The agents most often incriminated are the viruses. The fact that the hemorrhage often follows an upper respiratory infection, and is frequently accompanied by myalgias is used by authors as evidence supporting their hypotheses of a viral nephritis. Labovitz¹¹ also states that a transient hematuria has been reported in known influenza A, mumps, echo type 9 and coxsackie viral infections.

(2) Another common postulation is that of an atypical post-streptococcal glomerulonephritis, with exacerbations precipitated by streptococcal or non-streptococcal infections.

(3) Immunologic injury is mentioned often^{9, 12, 19} and was discussed with the section on immunofluorescence.

(4) Finally, Marks¹⁷ states that a "*familial tendency to red blood cells leaking from glomerular capillary basement membranes appears to be the sole abnormality.*"

It appears that the syndrome of recurrent non-symptomatic hematuria may have a variety of causes acting through a common pathogenic mechanism. Roy¹⁰ thinks that identifying this pathogenic mechanism may be more important than identifying the causative agent itself.

In summary, recurrent nonsymptomatic hematuria is a common clinical syndrome of unknown etiology. It carries an excellent prognosis, and must be diagnosed by exclusion of the more severe causes of hematuria.

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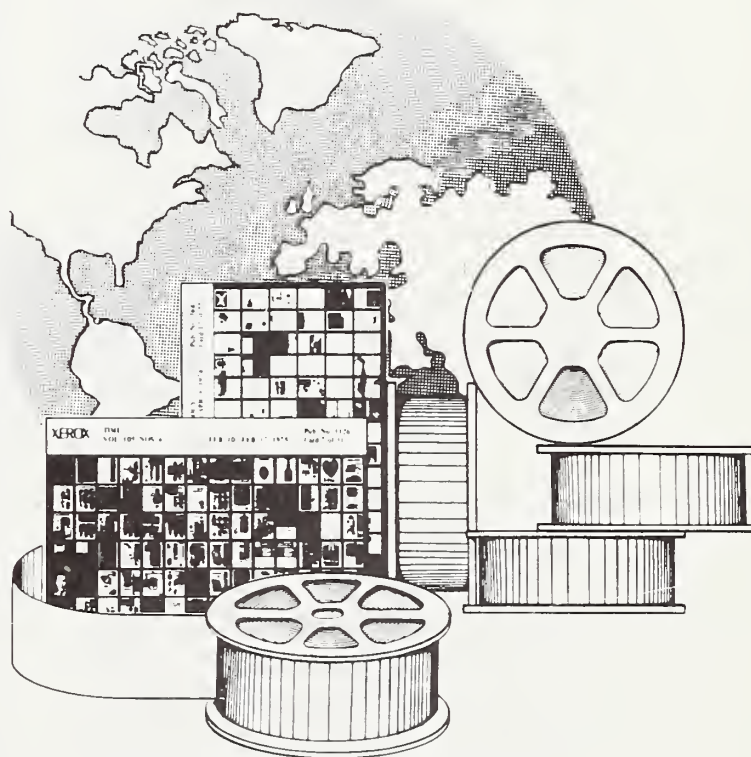
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The Use of Anticonvulsant Medication During Pregnancy

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Anticonvulsants have been implicated as possible factors producing congenital malformations in the infants of epileptic mothers. How does this influence the management of the pregnant epileptic female?

During the past several years, a good deal of controversy has arisen over the possible teratogenicity of anticonvulsant drugs. With the demonstration of a high incidence of cleft lip, cleft palate and other congenital malformations in mice exposed to diphenylhydantoin (phenytoin) during fetal life, numerous investigators have sought to link anticonvulsant drug ingestion in the first three months of pregnancy with a prominence of cleft lip and/or palate and congenital heart lesions in the offspring of epileptic women.

Out of these diverse but retrospective studies, the predominant finding has been that the risk of having a child with congenital abnormalities is two-to three-times greater for a

mother who took anticonvulsant drugs during her pregnancy as compared with the non-epileptic mother. Of these congenital abnormalities, cleft lip with or without cleft palate and congenital heart lesions seem to occur with the greatest frequency.⁴ Whether this is a causal relationship remains an open issue.

Nevertheless, the clinician caring for the epileptic woman who is maintained on anticonvulsant therapy and who desires a pregnancy or, indeed, becomes pregnant now finds himself confronted with somewhat of a dilemma. Should he continue such therapy during his patient's pregnancy with the possible risk of fetal malformation; or should he discontinue anticonvulsants altogether during the critical first trimester of fetal organogenesis with the inherent risk of precipitating or dangerously increasing seizure activity in the mother?

Perhaps the following case history better illustrates the quandary confronting the physician caring for such a patient.

ILLUSTRATIVE CASE HISTORY

A 23-year-old, married, white, woman presented approximately eight weeks into her first pregnancy. She questioned whether her anticonvulsant (phenytoin) might have adverse effects upon her developing fetus.

Her seizures had first appeared at five years of age. They remained fairly consistent in character thereafter with only minor variations in format. They were usually announced by the sudden appearance of a strong feeling of apprehension unrelated to occurrences in her environment. Her thoughts, as she put it, would become "stuck on one idea" and her surroundings would seem "far away." She often displayed brief, semi-purposeful movements of various extremities. Following such an episode, she would often be amnesic for the actual event and would experience a brief period of confusion accompanied by a generalized headache.

Between seizures she was asymptomatic. No abnormalities were found upon neurologic examination and a recent EEG was within normal limits.

The patient had been treated with phenytoin. Due to persistence of her seizures the dosage of this was increased at age 15 to 300 mg. daily and she had then remained seizure-free for approximately seven years preceding consultation. She admitted to frequently omitting her phenytoin dosages and stated that this had been particularly true after she began experiencing nausea accompanying her pregnancy.

It was debated, in light of the considerations discussed in this paper, as to whether to continue her phenytoin. The alternative was a necessarily fairly rapid withdrawal of the drug with the attendant risk of precipitating either a reappearance of her seizures or the appearance of generalized convulsions and even, conceivably, status epilepticus. This problem was solved when testing for serum phenytoin concentration showed no measurable levels. Her phenytoin was withdrawn and she continues seizure free.

DISCUSSION

Since the teratogenicity of anticonvulsants taken during the first trimester of pregnancy has not been unequivocally proven in any type of systematic prospective study, the possibility exists that there are other associated risk factors that could be responsible for the increased incidence of malformation in the offspring of epileptic mothers. Monson *et al*⁵ (1973) found that women with epilepsy "tended to have characteristics associated with an increased risk of malformations — for example, they tended to be older, were of lower social class,

gave birth more frequently to stillborn children, and more often had hydramnios." It is conceivable that other such risk factors totally account for the increased frequency of congenital malformations and that anticonvulsant usage is merely an associated but causally unimportant factor. Other important variables to consider would include the effects of seizure activity itself during pregnancy as well as both genetic and environmental influences.

Do seizures jeopardize the health of the fetus? According to the literature, there is no evidence that the frequency of fits in pregnant epileptic women is in any way related to a higher degree of defects in their offspring.³ Healthy infants have been born to mothers who suffered a somewhat malignant course of seizure activity.⁴

As far as possible genetic influences are concerned, a considerable portion of malformations seen in the offspring of epileptic mothers appear to be familial with a greater incidence of cleft malformations occurring in the families of epileptic women.²

Environmental factors have also been shown to increase the risk of congenital deformities. The lower socioeconomic group in general gives birth to an increased incidence of malformed infants. Epileptic individuals have also been shown to be limited in their choice of partners.⁷ Age, of course, is also a relevant risk factor. Epileptic women generally tend to marry later in life and bear children at an older age.⁵

The foregoing case history attempts to illustrate the situation now faced by the many physicians who care for young epileptic women who are desirous of pregnancy or who present in the early weeks of pregnancy. The solution,

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in the case presented, was relatively simple. This young woman was found to have no detectable serum phenytoin levels; a fact probably related, at least in part to the vomiting she had been experiencing during these early weeks of her pregnancy. Because there has been no recurrence of her seizure activity and because serum phenytoin levels were essentially non-existent, it was elected to completely withdraw her phenytoin. Nevertheless, she represents but one of a large population of epileptic patients that accounts for approximately 0.3% to 0.5% of all pregnant women and the management of others may not be as simple.

Until such time as definite information concerning the significance of the various suspected risk factors including the anticonvulsants is forthcoming, are there guidelines with which the physician can sensibly approach the management of this population of epileptic women with the greatest benefit to both mother and child? Not only is it important to maintain good seizure control in these young women, but one must attempt to reduce, as far as possible, suspected risk factors of malformation in the developing fetus.

Pregnancy, in the epileptic woman, should probably be discouraged if she is older than 35 years of age, has diabetes mellitus, has had previous spontaneous abortions or stillborn children or if there is a family history of congenital malformations.

In the epileptic woman who desires a pregnancy in the absence of other contraindications, or who has become pregnant,

management is best directed at using as few anticonvulsant medications as possible consistent with satisfactory seizure control—a rule applicable, for that matter, to the management of any epileptic. Serum anticonvulsant determinations can be monitored as an aid to maintaining serum concentrations at a modest but therapeutic level during pregnancy, particularly during the first trimester.⁴

SUMMARY

Suspected risk factors possibly contributing to the increased incidence of congenital malformations in the offspring of epileptic mothers have been reviewed. It appears that this increased incidence may well be, at least in part, related to the epilepsy itself and that the possible teratogenicity of anticonvulsant medications in humans is still an open issue.

The physician caring for the pregnant epileptic young woman should aim his management at attempting to reduce all possible risk factors.

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William P. Longmire, Jr., MD, Gentleman, Surgeon, Teacher, Scholar

MICHAEL S. McARTHUR, MD

Reflections on the life and times of a native Oklahoman who has achieved prominence in the fields of surgery, academic administration and teaching.

On July 1, 1975, Dr William Polk Longmire, Jr., Professor and Chairman of the Department of Surgery, University of California School of Medicine at Los Angeles (UCLA), announced his retirement as Chairman after 27 productive years as one of the most distinguished and capable leaders of American surgery. I have known Dr Longmire since 1966. At that time I served as one of his surgical house officers, and it was through his association and under his supervision that I developed an intense respect and admiration for the man. He possessed an unmistakable quality of greatness; one which transcended all aspects of his life and affected those of us less gifted.

William Jr., was born September 14, 1913, and raised in Sapulpa, Oklahoma. He was the fourth child of Dr and Mrs William Polk Longmire. His father, a graduate of the University of Louisville Medical School, was actively engaged in general practice from 1901 until his retirement in 1940. Following completion of medical school, the senior Dr Longmire took a "train to the end of the line." He arrived in the southwest shortly after Oklahoma achieved statehood and married the former Grace Mae Weeks, a native Missourian and daughter of a State Supreme Court Judge. The new Mrs Longmire continued to teach grade school at the time she and William Polk Longmire, Sr., were married.

William Jr., completed high school in Sapulpa — serving as president of his Senior class (1930) — with a respectable, but not outstanding, scholastic record. That fall he enrolled in the premedical curriculum at the University of Oklahoma. His outstanding scholarship record is signified by his membership in Phi Beta Kappa; he belonged to a number of social and scholastic organizations and eventually served as president of his social fraternity. In 1934, he was named one of ten outstanding men in his graduating class. This was a period of severe financial depression in our country, and in order to support himself his last three years at the University, he organized a laundry service in the basement of his

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fraternity. This provided enough income to defray the major share of his expenses. As a result of this financial adventure, he was known by his fraternity brothers and classmates as "Hop-Sing" Longmire.

During his first year in college, he met Dr Aute Richards, Chairman of the Department of Zoology and one of several teachers who influenced his career development. Dr Richards frequently selected promising young men from his classes and took a great personal interest in their development. It was through his insistence and encouragement that William applied for admission to The Johns Hopkins University School of Medicine: as a matter of fact, he made no other applications. He was accepted into the freshman class in 1934. As a result of his excellent scholastic performance, he was elected to membership in the Alpha Omega Alpha honor society his junior year. He then received his MD degree in 1938 and was selected for surgical internship. After completion of his internship, he served a year in the Hunterian Surgical Laboratory as the "Harvey Cushing Fellow in Experimental Surgery." The following year he returned to The Johns Hopkins Hospital as the "Halsted Fellow in Surgical Pathology."

Dr Longmire married Jane Jarvin Cornelius of Baltimore, Maryland, in 1939. All who know Mrs Longmire can appreciate what a wonderful companion she has been to Dr Longmire during his ascending career. They are the parents of three children: William III, Gill and Sarah Jane.

When Dr Longmire, Sr., became ill in 1940, William left Baltimore on a temporary leave of absence to return to Oklahoma and maintain his father's practice. Although the move to Sapulpa that September temporarily interrupted William's surgical training, it did provide him with valuable practical experience. He recalled, some years later his first clinical encounter:

Within a week after receiving the news of my father's serious illness, I was occupying his office and trying to learn something of the details of his practice from his office nurse and secretary. During this period my father was extremely anxious to have me come to his bedside each evening and report the days activities regarding his patients, and although he was unable to speak to me he listened intently and understood what he was told. I could tell from his smile or frown whether or not he thought a particular patient or situa-

tion had been handled properly. In my effort to learn from him how he would handle certain situations which I had not previously encountered, I would pose questions to him that could be answered by yes or no and thus was able to arrive at some conclusion as to his evaluation of the situation.

My patients for the first week or ten days, however, were all my father's patients for whom treatments had been previously instituted, and it was merely my chore to carry on what he had diagnosed and prescribed. My first call for my own patient came one evening just as I was preparing for bed when a young man's voice, obviously transmitted over a rural telephone line, asked if I could come out to his house three miles east of Pumpkin Center to see his wife. As I answered that I would, it suddenly dawned on me that I should make some effort to determine what type of illness I might be called upon to see. In answer to my question he replied, "my wife is having a baby." Further discussion elicited the facts that she was 18 years old, that this was her first baby, and that she had not been examined by any other doctor throughout her pregnancy. He said she had started having labor pains that morning, that "her water had broke several hours ago," and a "friend" had told him that it was time now that he should get a doctor. (From William P. Longmire, Jr., written communication ' 1960)

Dr Longmire quickly mobilized the necessary equipment and began his journey to Pumpkin Center. Although those of us who know him and have worked with him do not seriously doubt his proficiency at any endeavor, his thoughts with regard to his first patient are interesting:

There were many fields of medicine at that time (and I might say even more so today) in which I felt that my knowledge and abilities were quite inadequate, and probably at the head of the list came the field of obstetrics. I had been exposed to the usual lectures and demonstrations in medical school, and I had always stated that I had participated in 2½ deliveries during the obstetrical quarter of the senior year of medical school. The ½ delivery was a case where the procedure was prolonged beyond the tolerance of the attending resident,

Since his graduation from the University of Texas School of Medicine, Michael S. McArthur, MD, has been certified by the American Board of General and Thoracic Surgery. He is a member of the Association of Academic Surgeons, the American College of Surgeons and the Southwest Surgical Society.

and he had taken over in my place to complete the delivery. I hesitated to acknowledge my deficiencies in this particular field, for I realized that if I were to conduct the general practice in which I was involved, I would have to develop some capacity in the field of obstetrics. Therefore, I proceeded to drive to my father's office, collect his obstetrical bag, and start out into the country over the gravel dirt roads. (From William P. Longmire, Jr., written communication '1960)

Needless to say, the delivery was uneventful; and a healthy 7½ pound boy was delivered by Dr Longmire. He was appropriately named William. This ended the initial but not the last encounter with this patient. While still an infant, the same child was delivered to the doorstep of the Longmire home with a bleeding scalp. The etiology of this episode was apparent once the historian (the mother) remembered seeing a large rat in the baby's crib. William quickly applied one suture to the laceration and discharged the patient to the care of his parents.

After spending a two-year period in Oklahoma, Dr Longmire returned to The Johns Hopkins Hospital and reentered the surgical program, directed at that time by Dr Alfred Blalock, a man who was to have a tremendous influence on the career of Dr Longmire, Jr. He assisted Dr Blalock in the first of the so-called "blue baby" operations for the correction of the tetralogy of Fallot, a landmark in cardiac surgery. The first of these technically-difficult operations was performed in 1944 and heralded the onset of enthusiasm for correction of congenital cardiac diseases. As a result of their close association and success with these and other endeavors, Doctors Longmire and Blalock became close personal friends, spending several summer vacations together with their families along the Atlantic seacoast.

Later, Dr Longmire served as Surgeon-In-Charge of the Plastic Surgical Service at the Hopkins Hospital. In 1948, the opportunity of joining the newly developing faculty at UCLA as the first Chairman of the Department of Surgery was offered to Dr Longmire. He moved to Los Angeles and joined a distinguished group of physicians, thus becoming one of the five founding fathers of the UCLA School of Medicine and spending the next 27 years directing the development of the surgical program into one of the leading departments of surgery in the United States. In addition, the



William P. Longmire, Jr., MD

UCLA School of Medicine ranks among the finest in the nation.

Throughout this period, Dr Longmire took an active interest in the graduate training of surgeons in this country and served as a participating member in numerous professional societies, *ie*, the Council on Medical Education of the American Board of Surgery, the Conference Committee on Graduate Education in Surgery, and the Scientific Board of the California Medical Association.

Dr Longmire has made many contributions to the practice of surgery. He was one of the first to demonstrate that total gastrectomy could be used for carcinoma of the stomach with a low mortality rate. He participated in the development of new methods of alimentary reconstruction following removal of the entire stomach. Based on his experience in cardiac surgery, he was one of the early workers in the direct surgical approach to the treatment of coronary artery disease. He organized one of the earliest surgical research laboratories devoted to the studies of tissue transplantation. The list of his publications continues to grow. The procedure developed a number of years ago for the relief of biliary obstruction has led

to a lifelong interest in hepatic and biliary tract surgery. Dr Longmire's early thoughts on this subject provide us with an insight into his brilliant mind:

As the field of American surgery evolved during the mid-forties, enormous interest was expressed in technical innovations based on physiological studies, on the achievement of respectable mortality rates with major operative procedures, and in testing the limits of massive excisional operations. As resident surgeons at the Johns Hopkins Hospital, we could not fail to feel the stimulating, creative attitudes of our Professor, Alfred Blalock. His dramatic success with the subclavian-pulmonary shunt operation in the treatment of the tetralogy of Fallot, during what was then the glittering new field of cardiac surgery, inspired us all to want to hasten to the experimental laboratory to test almost any idea that occurred to us. Dr Blalock encouraged an active approach to any scientific problem, and he often said that an idea should be tested in the laboratory before too much time was spent reading about the subject lest one become too confused or discouraged ever to give the idea a try.

One day while making patient rounds with Dr Blalock, I asked him what he thought of an idea of mine for providing drainage of the obstructed biliary system in patients with blockage of the normal extrahepatic biliary channel. The idea, as proposed went something as follows:

Since there are no valves in the bile ducts, perhaps an adequate opening into the biliary system could be provided by resecting a wedge of liver tissue from the thin lateral portion of the left lobe, opening an intrahepatic duct, and then draining such an open duct permanently into the upper intestinal tract, thus creating a by-pass for bile flow from the entire liver. I particularly had this in mind as a treatment for the "yellow baby" (as contrasted to the "blue baby" with the tetralogy of Fallot) or the new-born infant with congenital biliary atresia, for I had read that in certain cases with this anomaly, the intrahepatic ducts were normally formed — even distended — when the extrahepatic system was atretic. I had never seen such a case, but I had explored several babies with biliary atresia and had assisted at the operation of others; in each case, after a laborious, painstaking search for some evidence of a patent extrahepatic biliary system, the otherwise perfectly formed, healthy baby would be returned to his parents with a tragic fatal prognosis.

Similar exceedingly difficult and frequently rather unrewarding experiences in the treatment of extensive benign traumatic strictures

of the common duct in adults had suggested that better operative procedures might be developed for the benefit of these patients.

(From Dr William P. Longmire, Jr., personal correspondence "1960")

Numerous investigative procedures in the surgical laboratory were then undertaken in an attempt to determine the feasibility of biliary-enteric anastomoses and to better define the exact anatomic relationship of the intrahepatic ductal system. Important observations were made as a result of these experiments. Eventually, the procedure was ready for clinical use; and in April of 1947, a left intrahepatic choledochojejunostomy was successfully performed. These results were reported in New Orleans at the January 1948 meeting of the Society of University Surgeons and subsequently published. (*Surgery* 24:264-276, August 1948)

Serving with Dr Longmire as a surgical house officer and a member of his staff was a privilege. It was apparent as he assumed a pivotal position in American surgery and surgical education that we were being led by a man whose fine qualities and insistence upon excellence would have a greater influence on us than we thought possible. Assisting "the Professor" at the operating table, attending Dr Longmire's Saturday Grand Rounds and hearing his clear, concise, and pertinent comments regarding patients are but a few fond memories. It was a special thrill to be a member of the team as "our Professor and Chairman" rose to national and international fame: President of the American Surgical Association, Chairman of the Board of Regents of the American College of Surgeons, President of the American College of Surgeons, 1947 Distinguished Alumni Award — The Johns Hopkins Hospital; Honorary Fellow of the Royal College of Surgeons of Edinburgh and of England. In addition, working with him on a project gave one a rare insight into the excellence and thoroughness which he applied to all tasks he undertook. During a visit to Dr Eric Fonkalsrud's office my first year at UCLA, my attention was drawn to a certificate proudly displaying his membership in "The Longmire Society." On the background were the imprinted words: detachment, humility, thoroughness, and method. My appreciation and interpretation of those words were more fully understood and accepted after years of association and fellowship with Dr Longmire.

Dr Longmire's announcement to relinquish his position as Chairman of the Department of Surgery after the 1975-76 academic year was accepted with mixed emotion. A copy of his letter making this announcement to the Dean of the School of Medicine and to his friend, Dr Sherman Mellinkoff, has also been forwarded to his former residents, current and past staff members, and close friends. The letter recalls the "infectious enthusiasm, stimulating vitality, and unlimited confidence" with which he joined the faculty at UCLA. Those of us who

served in lesser roles under him were, by the very nature of his association, witnesses to his enthusiasm and participants in this project for varying periods of time. It is certain, however, that Dr Longmire's contributions to surgery and his support of professional organizations will continue in spite of his most recent announcement. It is hoped his clinical practice will go forth uninterrupted, thus enabling both patients and associates to benefit from his talents and knowledge.

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Oklahoma Immunization Action Program

The availability and use of safe effective vaccines has created a widespread belief that polio, measles, rubella, diphtheria, pertussis and tetanus are diseases of the past.

This misconception challenges practicing physicians, public health workers, volunteer organizations, and particularly parents, to place high priority on seeing that all children are adequately immunized against these diseases.

Oklahoma's Amended School Immunization Law has been an extremely effective tool in increasing the school-age immunity levels. It is estimated that the immunity levels for polio, measles, rubella, diphtheria, tetanus and pertussis are approaching 95% or better. However, approximately 1/3, or 96,000, of Oklahoma's more than 300,000 preschool children are inadequately immunized against these diseases.



News From The Oklahoma State Department of Health

In an effort to increase the immunity levels of Oklahoma's preschool population, an intensive public awareness campaign entitled, "Oklahoma Immunization Action Program," is scheduled to begin in April. This program will run for six consecutive months ending in September. The goal of OIAP is to educate and motivate parents of preschool children to update childhood immunizations. The activities of OIAP are being provided by state agencies and professional and volunteer organizations from across the state. These organizations will play an active part in reaching the parents on a one-to-one basis through preschool round-up clinics, direct contact on a professional and fraternal basis, and the intensive use of all media sources.

The Oklahoma State Department of Health encourages the Oklahoma Medical Association to support the goal of OIAP and to continue our mutual effort to protect all children against the vaccine preventable diseases. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR FEBRUARY, 1977

DISEASE	February 1977	February 1976	January 1977	Total To Date 1977	Total To Date 1976
Amebiasis	—	—	—	—	2
Brucellosis	—	—	—	—	—
Chickenpox	192	322	153	345	566
Encephalitis, Infectious	—	1	1	1	1
Gonorrhea (Use Form ODH-228)	920	1058	1003	1923	2184
Hepatitis, A, B, Unspecified	75	169	52	127	430
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	—	7	—	1	11
Meningitis, Aseptic	1	—	3	4	3
Mumps	106	114	93	199	191
Rabies in Animals	19	6	19	38	12
Rheumatic Fever	—	—	—	1	1
Rocky Mountain Spotted Fever	—	11	1	1	—
Rubella	4	—	4	8	24
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	16	73	7	23	182
Salmonellosis	2	13	7	9	22
Shigellosis	3	9	3	6	24
Syphilis, Infectious (Use Form ODH-228)	5	11	9	14	24
Tetanus	—	—	—	—	—
Tuberculosis, New Active	29	26	16	45	51
Tularemia	—	—	—	—	—
Typhoid Fever	—	—	—	—	—
Whooping Cough	—	—	1	1	1

Handicapped People And Affirmative Action

Jimmy Denny

Today in the United States there are over 20 million handicapped people. Throughout history these people have been shunned and ridiculed by society because of their disabilities. They deserve the right to go where everyone else goes, participate in the same activities, and, most important, they deserve the chance to be hired and maintain jobs in which they qualify.

In the past few years handicapped people have made great strides in gaining the right to work without discrimination. American business and industry have taken big steps in hiring handicapped people, but there are still many qualified handicapped people who have been deprived of an equal chance to work or an equal chance to get ahead on the job. The Affirmative Action law passed by Congress in 1973 is intended to equalize their opportunities.

The Rehabilitation Act of 1973 requires any employer with a federal government contract or subcontract of more than \$2,500 to take affirmative action to hire and advance the handicapped.

This law, subtitled "Affirmative Action," brings up the question, "Who is handicapped?" A handicapped person is anyone who: has a physical or mental impairment which substantially limits one or more of his major life activities; has a record of such an impairment; or is regarded as having such an impairment.

"Affirmative Action" does not include every

handicapped person. A person must be capable of performing a particular job with reasonable accommodation to his handicap, and at the same minimum level of productivity that would apply to anybody. "Affirmative Action"



Mrs. Carolyn Benham, teacher of the prize-winning student in Oklahoma's Ability Counts contest, is shown above receiving a \$250 check from Doctor James R. Rhymer, Clinton. Also shown is John Harris, Chairman of The Governor's Committee on Employment of the Handicapped. The OSMA check will be used to pay her way to the national Ability Counts contest in Washington, D.C. Mrs. Benham, a Stigler teacher, worked with the prize-winning student, Jimmy Denny, on his paper entitled "Handicapped People and Affirmative Action." The paper is printed in this issue of *The Journal*.

guarantees the right to work to millions of handicapped persons across America.

Most handicapped individuals are well aware that on the job their handicaps cause no problems or only minor difficulty. The real problem is not in holding a job, but in getting a job in the first place.

The otherwise qualified job-seeker who has a visible handicap is working against a number of disadvantages — mostly unfounded myths and misunderstandings which make employers reluctant to hire the handicapped. Among the unfounded marks against the handicapped are that insurance rates will skyrocket; considerable expense will be involved in making necessary adjustments in the work area; safety records will be jeopardized; special privileges will have to be granted; other employees will not accept the handicapped.

All of these myths have been proven to be false assumptions. Assessments of actual on-the-job experience with handicapped workers reveal a picture of average-or-better ratings in those areas which count most with employees: job performance, safety, and attendance.

Recently, an extensive survey of handicapped worker performance was conducted by E. I. du Pont de Nemours and Company, America's sixteenth largest employer (110,000 employees).

Du Pont's eight-month study gathered data on 1,452 employees with physical handicaps such as orthopedic problems, blindness, heart disease, vision impairment, amputations, paralysis, epilepsy, hearing impairments, and total deafness.

The handicapped people fared very well in the results. They were tabulated in seven critical areas and the findings should encourage any employer to review hiring practices concerning the handicapped.

The key findings of the du Pont study indicated the following:

(1) Insurance: No increase in compensation costs nor lost-time injuries.

(2) Physical Adjustments: Most handicapped require no special work arrangement.

(3) Safety: 96% of handicapped workers rated average-or-better both on and off the job.

(4) Special privileges: A handicapped worker wants to be treated as a regular employee.

(5) Job Performance: 91% rated average-or-better.

(6) Attendance: 79% rated average-or-better.

The du Pont study also revealed that there is very little difference between handicapped and non-handicapped workers as to their ability to work harmoniously with supervisors and fellow employees.

Bringing the matter close to home, I discovered some interesting facts concerning the employment of the handicapped. Through interviews I learned that area businessmen are, for the most part, reluctant to hire the handicapped. Royce Denny, a local contractor, stated, "I don't think I could use a handicapped person in my business." But, after being shown the results of the du Pont survey, Denny seemed surprised and showed more willingness to employ the handicapped. This was the view most people took. Based on the results of the interviews, I came to the conclusion that businessmen do not know enough about the problem and should be better informed on the abilities of the handicapped.

The results of the du Pont survey and similar surveys taken throughout the country show that the 7.2 million handicapped people in the US of work force age are definitely capable and should be employed.

But through the cooperation and response of business leaders and concerned government officials, "Affirmative Action" and other similar programs of the future will not only assure the handicapped worker a well-deserved place in our society but will also preserve their dignity and rights as individuals. □

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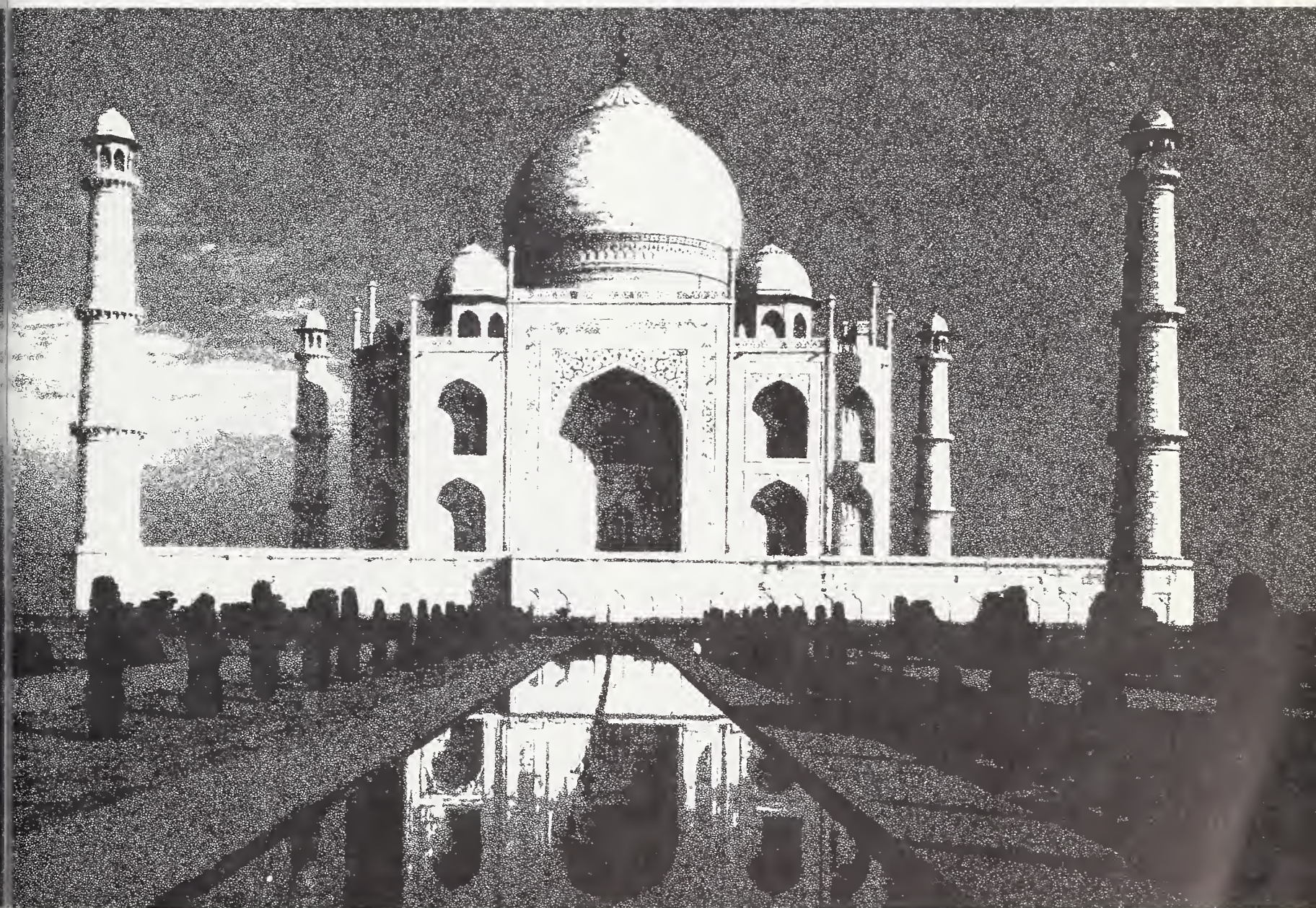
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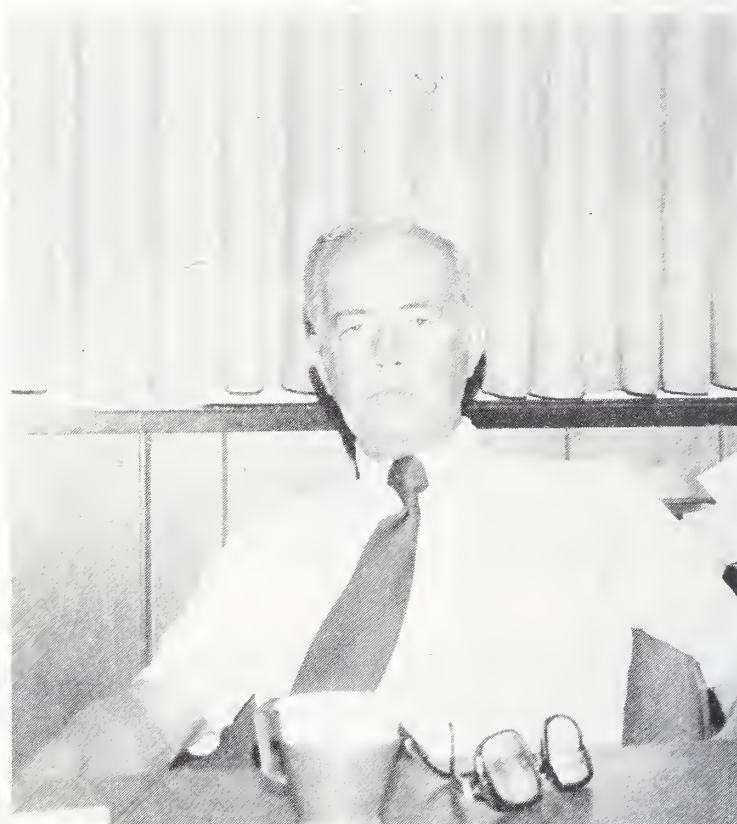
An Interview with Rex E. Kenyon, MD, AMPAC Chairman

By Richard L. Hess, OSMA Director of Communications

Editor's Note: Rex E. Kenyon, MD, of Oklahoma City, was recently elected Chairman of the Board of Directors of the American Medical Political Action Committee. Doctor Kenyon was instrumental in the formation of AMPAC and has been active in politics and organized medicine for many years. Before his election as AMPAC Chairman, Doctor Kenyon served on the AMA's legislative council and has served organized medicine in various national capacities. His position with AMPAC is one of the highest positions in organized medicine ever attained by an Oklahoma doctor. *The Journal* arranged for this interview with Doctor Kenyon in order to discuss AMPAC, politics and the future of American medicine.

Journal: First of all, Doctor Kenyon, let me congratulate you on being elected Chairman of the Board of AMPAC. It is a great honor, I am sure, for you, and I know that it is a great honor for Oklahoma to have a physician in such a high position. Since you were instrumental in the formation of AMPAC and in its development in its early years, would you first of all briefly describe how AMPAC came about.

Kenyon: The AMPAC movement started back in 1961 as it became apparent that there was greater and greater intervention on the part of the federal government in the free enterprise system. Since a corporation like the American Medical Association cannot put dol-



The AMPAC movement started back in 1961 as it became apparent that there was greater and greater intervention on the part of the federal government in the free enterprise system.

lars directly into a campaign, it was decided to set up a separate voluntary organization which became known as the American Medical Political Action Committee. At this stage of the game a good many states were further cognizant of this, and they followed AMA's example and set up their own state PACs. We now

have a state PAC organization in each of the states. We are not affiliated, and I would like to stress that, and that's because of the federal election campaign act which limits giving by affiliated committees. So we are in no way affiliated. Each of our state PACs is autonomous and AMPAC is autonomous. We don't tell them how to run their PAC, and they don't tell us how to run AMPAC. While we generally support the same candidates that they support, since quite obviously our recommendations are coming from a state level, we are not bound to do so. In other words, there's no agreement that we will support the state PAC's candidate. That's sort of a general background of how the whole thing got started.

Journal: What are the advantages of belonging to AMPAC? Why shouldn't a physician simply contribute his dollars to the candidate of his choice and avoid a middle man?

Kenyon: The fact of the matter is that the individual physician does not give to the candidate of his choice. Many do, of course, but the large majority do not. I have worked on enough

It has never been our theory that we should buy a candidate. If a candidate is for sale, he is for sale to the highest bidder, and labor quite obviously can outbid us dollar for dollar right down the line.

individual candidate support committees to know that it is very difficult to get dollars out of doctors for a political campaign. People say just what you have said: "Why don't I give individually. I don't want to join AMPAC." But those same people don't give individually. So by applying a little salesmanship and by making people aware of the organization we can accumulate enough collected dollars to make an impact so far as the candidate's race is concerned.

Journal: Does a physician-member of AMPAC have any say in the selection of candidates?

Kenyon: The individual physician can go to his state PAC and ask that they support his candidate, and the state PAC Board will then decide whether or not to do so. Or he can write



We don't lobby. AMPAC makes no policy.

directly to AMPAC and ask us to support his candidate. We, of course, are going to check the candidate out to see whether or not he is the type of man we want to support. So the individual can request candidate support, but the final authority and distribution of funds lies with the PAC board.

Journal: How does AMPAC determine which races it will get involved in and which candidates it will support?

Kenyon: If OMPAC wants funds for Mickey Edwards, for instance, they will write and give us a complete resume of Mickey Edwards. If they don't give us sufficient information, then we call them up. We ask them questions such as what do your polls show, how strong is he running, what are your chances of winning, is he this or is he that? Then that information is fed back to the committee and we make a decision on the basis of that. We almost always act only on a request of the PAC, but we are not bound to do so. You and I sitting here in the 5th Congressional District of Oklahoma know a lot more about this race than the people in Chicago, so we have to rely on the feedback.

Journal: Is AMPAC bipartisan or does it normally support candidates from one political party?

Kenyon: I would say AMPAC probably supports more Republicans than Democrats at a



We don't want to wind up like the National Health Service of Great Britain and that is the road that we were going down before we became politically active.

federal level. But there's not that great a difference. In the solid, conservative south we support far more Democrats than we do Republicans. Obviously that's Democratic country. These are conservative candidates and they'll listen to us. We're supporting a lot of Democrats this year.

Journal: Does AMPAC ever support minority party candidates or independent candidates?

Kenyon: I'm going to say yes, although I'm not a hundred percent certain. I believe AMPAC supported Buckley's race in New York as an independent. We would support anybody if the man is the right one. We're going to try to keep our friends and incumbents in Congress, and we're going to try to knock those off who are not our friends. So the number one thing is what is the man's philosophy and whether he is our friend. Number two is what are his chances of winning, because if he doesn't win then we've lost the whole ball game. His opponent is mad at us and we've just poured money down a rat hole. A loser is no more influential in Congress than I am, for an example. Third, does he really need our help. It's ridiculous to give large sums of money to a candidate who is already well funded or who has an absolute walk away. We grade our races as A, B, C and so

forth. An A race is a target race. This is one that we've just got to win or to pour everything we can into it to try to win it. On a B race we give some help, and a C race is one that's a safe seat. It may be an enemy or it may be a friend.

Journal: Will AMPAC contribute funds to an unfriendly candidate in order to develop a better working relationship?

Kenyon: Well, actually you're saying are we trying to buy his vote, and I want to point out that we're not going to do it. We have been criticized for supporting certain candidates, one a California congresswoman who has a very liberal voting record. But she has voted with us right down the line. She's friendly with us, and so we give her money so long as she's voting for medical issues. We'd like for her not to be liberal, but she is. But no, we would not support an unfriendly candidate unless there was some indication that he was turning around or certain people had been able to get to him to present our story and he indicated that he would be more friendly in the future.

Journal: Does AMPAC contribute funds to state races?

Kenyon: No, we have never given money to a state race. It is frequently requested, but we give our money only to Congressional candidates. We don't get involved in gubernatorial races either.

Journal: AMPAC has been sharply criticized by some persons for its support of Gerald R. Ford and the tremendous amount of money it supposedly contributed to his campaign. Why was Ford selected, and how much money was he given? I've heard that AMPAC gave Mr. Ford over \$1 million.

Kenyon: AMPAC spent not one dollar on the presidential race. We have a policy against supporting a presidential candidate that has existed since the beginning of the AMPAC. We vote on it periodically, and it has always failed by something like 7 to 3. We weren't in that race at all, nor do we have any intention of getting in a presidential race in the near future. It actually seems rather foolish for us to get into one. Number one, to counter your question, there is no way in the world we could spend a million dollars. The Federal Campaign Reform Act limits us to \$5,000. That's the most we can give. Really \$5,000 in a presidential

race is a drop in the bucket. It would hardly get past the first secretary.

Journal: How much of an impact has AMPAC had on the election process and how does it compare to other political action committees?

Kenyon: I think we have made considerable impact. We are the second strongest PAC in the country — labor, of course, being by far and away the stronger dollarwise, memberwise and everything else. But we have contributed significantly to enough candidates that we are at least heard. I think we're having an increasing amount of influence on Capitol Hill. It has never been our theory that we should buy a candidate. If a candidate is for sale, he's for sale to the highest bidder, and labor quite obviously can outbid us dollar for dollar right down the line. Our

AMPAC spent not one dollar on the presidential race. We have a policy against supporting a presidential candidate that has existed since the beginning of AMPAC.

philosophy has been that we want to seek out a man who will at least listen to us. He may vote against us every now and then. What we want is his ear, his open door, and we want him to listen to us. We would like for him to call us, which incidentally a number of our congressional delegation does. They call us for our opinion before a key vote. One of my partners got a call from one of them yesterday as a matter of fact. This is how we are trying to work.

It's very interesting. I went to the hearings and testified on behalf of AMPAC on the federal election reform act. This was when they were promulgating the regulations. Several people testified, people like the United States Chamber of Commerce, the Democratic Senate Committee, and so forth. Every one of them mentioned AMPAC in their own testimony, so they know who we are. They would kind of like to have us on their side, dollarwise and influence-wise. You know it takes more than money to win a race. It takes people who are working in the campaign. Physicians are well known, they are influential, and they are generally respected. Having a candidate support committee formed of doctors is a feather in the cap of any candidate.

Journal: What type of representation does AMPAC have? That is, what percentage of doctors belong to the organization?

Kenyon: Roughly 25 percent of the doctors in the country are involved in AMPAC.

Journal: Although AMPAC does not have as many members as you would like, it obviously has pumped a considerable sum of money into the political process. Still, however, Congress seems to be anti-medicine and national health insurance still looms as a distinct possibility. Wouldn't this indicate that AMPAC's dollars are being wasted?

Kenyon: Well, I've got to counter that by saying would it not already have been done had it not been for our influence on Capitol Hill. By our influence I'm talking about the American Medical Association, because they are our legislative and our lobbying group. We don't lobby. AMPAC makes no policy. We don't take a stand and we don't lobby. We simply raise money and try to get people elected. After that it's up to the AMA's legislative department and our lobbyists to try to influence legislation. Yes, a good many bills have gone against us because of the complexion of Congress at times. But I think we have been successful in, number one, delaying a good many of them, and number two, amending them successfully so that

(Continued on Page 155)



You and I sitting here in the 5th Congressional District of Oklahoma know a lot more about this race than the people in Chicago.

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we could live with them a little more easily than had they gone through in the original form.

Journal: What type of relationship does AMPAC have with the American Medical Association and the OSMA? Is there close cooperation or do the organizations function independently?

Kenyon: First of all let me start with the AMA and AMPAC. We have a very close working relationship. Representatives of the American Medical Association, the AMA staff and Board of Trustees sit in on our meetings and we have two people, Ed Bettingfield and myself, who serve jointly on the Legislative Council and on the AMPAC Board so that the liaison is excellent. We also have great rapport with the Executive Vice-President of the American Medical Association.

In Oklahoma we have enjoyed for as long as I can remember the complete endorsement of our OSMA officers, our trustees and the leadership of our state association. They have been tremendously helpful to us, and I would like to stress that this is absolutely essential. In the states where they do not have the endorsement, or full support of the state medical leadership, they have notoriously poor PAC groups. Take New Jersey for instance. They had a very, very weak PAC, because the state medical leadership was anti-PAC. They've turned it around now by electing some pro-PAC people to their top positions and all of a sudden the New Jersey PAC is a sensationally good one.

Any doctor who says, "Let me practice medicine and don't interfere with me politically," is living in a dream world because the government is becoming more and more involved in his practice.

Journal: I have read statistics that indicate AMPAC is successful in a little over 50 percent of the races it becomes involved in. Assuming that there is a 50/50 chance the candidate of your choice will be elected in any race, what is the purpose of AMPAC and why should a doctor contribute to it?

Kenyon: It's not a 50/50 chance. I think you have to counter a question like that by saying



The fact of the matter is that the individual physician does not give to the candidate of his choice.

what would have happened if we weren't there. It might have been 60/40. It might have been a much, much different situation.

Journal: Now that you are Chairman of the Board of AMPAC, do you plan any drastic organizational changes?

Kenyon: I doubt if I'll make any dramatic changes. The organization is pretty well oiled as it is. We're going to focus on several things since this is not an election year. We're going to have a much increased membership campaign and a much increased educational effort. I guess the two are probably synonymous. We're educating people about the need to get into political activity, and at the same time we're saying to them get into it by yourself and through us. It's not enough just to send a check to us in order to get involved. One of the things we will urge most strongly is the early formation of candidate support committees in time to win an election. The time to begin a campaign is the day after the election, and not three months prior to the next election. So we're going into every state in the union putting on political seminars and so forth, urging doctors and their wives to get involved with the formation of candidate support committees.

Journal: How important is it to a state to have a doctor on AMPAC's Board of Direc-

tors? Now that you are Chairman, can Oklahoma expect more AMPAC dollars?

Kenyon: I have never seen any instance in which a PAC board member put any undue influence on the PAC board in general to give money. I just haven't seen it. Now granted, if a PAC board member stands up and says, this is a good guy and you ought to support him, we know that our PAC board member is a political animal or he wouldn't be where he is on the board so we respect his request. But Rhode Island will get just as much consideration from the PAC board as Oklahoma, and they don't have a PAC board member. That, incidentally, is a point that should be stressed. People will point out that, "We put in \$30,000 and only got back \$15,000." The answer to that, of course, is that they only needed \$15,000 to support the candidates in their own particular state, and we used the other \$15,000 to go into those states which were weak. The Senator's vote from Vermont is no bigger than the Senator's vote from Oklahoma. So we put money into key areas.

Journal: Despite all that you have already said, some doctors will view AMPAC as a special interest group whose sole purpose is to influence the political process through its money. Some will even accuse AMPAC of buying elections. How would you answer these charges?



Those people who were with us were with us before we came, and those people who were against us were against us after we left.

Kenyon: Of course, there have always been special interest groups and there always will be special interest groups, not necessarily working together at all times. There is no question that the people who contribute money are those who probably formulate the congressional ideas. You know, this man is sitting up there considering thousands of pieces of legislation, and he can't be an expert in all areas, and he's going to turn to his friends, and his friends are his supporters. So, yes, we are influencing Congress through our money. But then let's look at it another way. We're not putting all that much money into any one given race, because we are limited by law. We can give \$5,000 to a candidate in the primary, we can give \$5,000 to him in a special, we can give \$5,000 to him in a run off and we can give \$5,000 to him in a general. And that's it. We can't give him one dollar more than that according to the law. The state PAC can do exactly the same thing. But when you look at the total amount of dollars required to run, say a senatorial campaign, and we're usually only in on the primary and the general, because there is frequently not a run off or a special, we're only putting in \$10,000, which isn't all that great amount of money in the total cost of running a campaign. So, no, we are not buying a campaign, we can't.

Journal: What about the doctor who doesn't want to become involved in AMPAC or in the political process because he feels medicine and politics don't mix?

Kenyon: Then he damn well is living in a dream world, and I will tell you that is exactly what I said. I was Chairman of the Public Policy Council at the state association, and they were trying to form OMPAC. I said politics and professionalism just do not mix. I didn't want to have anything to do with it, until I became President of the state medical association. At that time we were lobbying with the Medicare bill. I made at least a dozen trips to Washington, and I found out one undeniable fact . . . that is that we didn't change one single vote. Those people who were with us were with us before we came, and those who were against us were against us after we left. I came home and said, "Fellas, we gotta get active in the political process and put some friends in Congress." That's the way it's got to work. Several other doctors and I got busy and started to build this PAC. So it was a challenge to do so. Any doctor

who says, "Let me practice medicine and don't interfere with me politically," is living in a dream world because the government is becoming more and more involved in his practice. That's why we have this effort going in the first place, to stop that encroachment on the private practice of medicine.

Journal: So ultimately the purpose of AMPAC is the protection and preservation of private medicine?

Kenyon: Yes sir, to keep the government out of medicine. We don't want to wind up like the National Health Service of Great Britain, and

that's the road that we were going down before we became politically active. I would venture a guess that we would probably have had a national health insurance bill before this time had we not developed an awful lot of friends on the hill. I don't think we'll have NHI this year. A lot of that is due to our efforts. We've succeeded in getting lots of things changed to our good, even though the bill in essence passed. With a little more strength we could change more things and do an even better job of protecting American medicine. But first American doctors are going to have to get involved in AMPAC. □

THE GHOST OF FREEDOMS PAST

*As a first class citizen, I'd rate
I've paid my taxes, pulled my weight,
Kept my conscience free from sin
Gone to church . . . least now and then.
With little leagues, I've learned to play
I've suffered hours of PTA,
I've paid my bills, observed the laws
And given to many a deserving cause.
But politics was not my dish,
I'd rather golf, or hunt, or fish,
When I was asked by Mr. Pate
Would I support his candidate?
I said I'd sent a prior check
'Twas all a lie . . . but what the heck,
When called to work for Senator White
I said my schedule was too tight.
When precinct meetings rolled around
I said that I was leaving town,
When Party help was needed now
I said, "They're all crooks, anyhow."
Then when it came the time to vote
I spent the day out in my boat,
And life rolled on, day in day out
About my future, I'd no doubt.
Then one night while dreaming fast
I met the Ghost of Freedoms Past,
He led me from my snug, warm bed
To show me things that lay ahead.
He showed me faces, thin and bleak
On folk who toiled through endless week,
Meeting quotas, reaching goals
Living under strict controls.
He showed me children reared by State
Whose aim was to indoctrinate,
Empty churches stood forlorn
Worship outlawed, buildings torn.
The Halls of Congress sealed by rust
Ballot boxes collecting dust,
He showed me life where fear was norm
And all were clad in uniform.
He said when scientific tests were made
My kids had been assigned a trade,
Their lives a drudge, a menial chore
They could aspire to nothing more.
I'd been assigned . . . he then decreed
To clinics where there was a need,*

*I'd have a bed and board and clothes
With coupons to exchange for those.
For such I'd file a six-part claim
But sign my number, not my name,
And serve each day without complaint
The State had now become my Saint.
I pleaded then, "It can't be true
There must be something I can do,"
He sadly paused, and then he said
"My friend, Democracy is dead.
There's just no way for legal fights
The Courts are closed, and you've no rights,
You had a chance in seventy-five
To keep that marvelous thing alive.
You simply said 'The job's not mine'
Now this is nineteen-eighty-nine,
For all the world, you didn't care
While there were others waiting there.
To call your life style to a halt
You lost your freedoms by default,
You gave it up just inch by inch
Those activists . . . they had a cinch.
So here it is, no hope no joy
Don't cry on me . . . you blew it, boy!"
And just then, I awoke in sweat
But I recall that nightmare yet.
Of life, with which I could not cope
Devoid of dreams, devoid of hope,
Devoid of warmth, devoid of love
Devoid of guidance from above.
I saw the error of my ways
And I will spend my lasting days,
Preserving all that we can be
A nation proud and strong and free.
And like my forebears in the strife
I'll pledge my honor, fortune, life,
I'll hold my right to vote most dear
And with it, keep your future clear.
I'll work and give . . . support, oppose
This land won't fall to some of those,
Who want things I saw that night
Who feel that socialism's right.
This was my lesson. It will last.
Learned from the Ghost of Freedoms Past.*

Rex Kenyon, MD, Chairman
AMPAC Board of Directors

NHI Expensive Says Budget Office

The dilemma facing the Carter Administration on national health insurance was bluntly stated by the Congressional Budget Office in its annual report. A plan fully financed by taxes, as Labor proposes, would use most of the money available for new programs "and would most likely require compensating reductions in other federal programs or tax increases above current policy levels." The budget office, which helps guide and determine Congress' spending and legislative plans, put the 1982 cost of such an NHI plan at a minimum of \$108 billion.

Alice Rivlin, Director of the Budget Office, said a strong economy could leave room for new federal programs adding up to an additional \$50 billion of spending a year over the next several years. However, a wholly tax-financed NHI plan would swallow this and more, if no cost-sharing devices were featured. Such a plan — as urged by organized Labor — "could add from \$168 billion to \$200 billion to federal health expenditures by fiscal year 1982," said the Budget Office report. In contrast, the re-

port continued, "a compulsory employment-based, premium-financed plan with cost-sharing (such as the AMA proposal) might increase federal spending by as little as \$15 to \$20 billion in 1982." □

IAP Names Leebron President

William M. Leebron, MD, an Elk City physician and last year's OSMA Vice-President, has been elected President of the International Academy of Proctology. The international organization has a membership of more than 750 physicians from across the world. Doctor Leebron and his wife, Charlotte, recently returned from a meeting in southeast Asia which included sessions in Taipei, the Republic of China, Bali, Singapore, and Aula Lumpur. □

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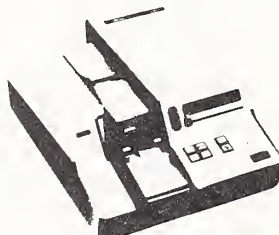
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OKLAHOMA MEDICAL SUMMIT '77

The Great Debates

A completely new and rennovated Oklahoma Medical Summit will be held this year in downtown Oklahoma City at the Skirvin Plaza and Sheraton Century-Center Hotels. This year's meeting, which will take place May 4th-7th, will feature a series of great debates, including "Exercise: Prevention and Rehabilitation in Cardiovascular Disease?", "Estrogen: Should We or Shouldn't We?," and "Allergy: Why and Where?" Additionally, nationally-known speakers from major burn centers across the country will conduct a National Burn Seminar.

This year's Summit promises to be the most informative and entertaining meeting ever held. In addition to the outstanding scientific program, Summit will feature a series of well-known speakers and entertainers. These include James H. Boren, cousin of the governor and author of *When In Doubt, Mumble*; Frosty Troy, a well-known local political analyst and editor of the hard-hitting *Oklahoma Observer*; Tom E. Nesbitt, MD, Speaker of the AMA House of Delegates and the big-band sound of the Les Elgart Orchestra. Boren and Troy

will appear at Summit luncheons and the Les Elgart Orchestra will be the featured entertainment at the Oklahoma Medical Alumni Association's dinner/dance. Comedienne Morey Amsterdam, who appeared on the Dick Van Dyke TV program, will be featured entertainer on the Friday evening program.

In addition to these events, Summit will also feature an Early Bird Social Hour, a Special Summit Party, a Beer and Oyster/Wine and Cheese Tasting Party, and a full program of events for the ladies. For those who want even more, Summit will also offer a sports program designed to relax and/or frustrate participants. Men's and women's tennis will be held at The Courts, and golf will be played at Oklahoma City's new PGA championship course, the Oak Tree Golf Club.

Oklahoma Medical Summit '77 offers a well planned and diversified program for both the physician and spouse. Hours and hours of planning should assure this year's Summit of being the best ever. □

TELEPHONE MESSAGE

While physicians are attending Oklahoma Medical Summit '77 in Oklahoma City, emergency calls may be referred to:

(405) 272-0229

A courtesy message center will be maintained by Southwestern Bell Telephone throughout Oklahoma Medical Summit '77. The main message center will be located near the exhibit hall at the Skirvin Plaza Hotel, and an auxiliary center will be maintained in the Sheraton Century-Center Hotel.

MEETING DIGEST

HOTEL ACCOMMODATIONS

Co-headquarters for Oklahoma Medical Summit '77 are the Skirvin Plaza Hotel and the Sheraton Century-Center Hotel in Oklahoma City. A large number of spacious and attractive rooms has been reserved for the use of physicians attending this meeting.

A room-reservation card for use by Oklahoma physicians was included in several previous Summit mailings. These cards should be used whenever requesting hotel reservations. If you did not receive a special card, you may request hotel accommodations by contacting Oklahoma Medical Summit, 601 NW Expressway, Oklahoma City, Oklahoma 73118, (405) 842-3361. OSMA delegates and alternates are reminded that the OSMA annual meeting and all official OSMA functions will be conducted in the Skirvin Plaza Hotel.

REGISTRATION

Summit registration will be located in the Skirvin Plaza Hotel. The reservation desk will be open from 8:00 a.m. to 5:00 p.m. Thursday, May 5th; from 8:00 a.m. to 5:00 p.m. Friday, May 6th; and from 8:00 a.m. to 12:00 p.m. Saturday, May 7th. Participants who pre-register may pick up their function tickets and all other information at the registration desk.

OSMA ANNUAL MEETING

The opening session of the OSMA House of Delegates will be held at 3:00 p.m. Wednesday, May 4th, in the Skirvin Plaza Hotel. Reference committees will meet at 8:00 a.m. Thursday, May 5th, and the closing session of the House of Delegates will begin at 2:30 p.m. Friday, May 6th. The OSMA Board of Trustees will meet at 12:00 p.m. Wednesday, May 4th. For additional information consult the preliminary program in this issue of *The Journal*.

SCIENTIFIC PROGRAM

Nine hours of continuing medical education credit will be available to physicians who attend Oklahoma Medical Summit '77. Anchoring the three-day series of scientific meetings are The Great Debates, which will feature dis-

cussions of Exercise, Estrogen Therapy and Allergy. Additionally, a National Burn Seminar will be conducted during the four-day meeting with a series of interesting and informative wet clinics and specialty sessions. For additional information, consult the preliminary program.

SUMMIT LUNCHEON SPEAKERS

Two outstanding luncheon speakers will appear during this year's Summit. James H. Boren, President of the International Association of Professional Bureaucrats and the author of several books including *When In Doubt, Mumble*, is expected to present an entertaining satire on the political way of life. Boren will appear at the Thursday, May 5th, luncheon in the Sheraton Century-Center Hotel.

Complementing Boren's satire on politics will be the Friday, May 6th, appearance of Oklahoma journalist, Frosty Troy. Troy is well-known as an expert on Oklahoma politics and will no doubt present an informative and hard-hitting speech.

On hand throughout Summit will be Tom E. Nesbitt, MD, Speaker of the AMA House of Delegates. Doctor Nesbitt is an authority on the socioeconomic issues facing medicine and is considered the leading candidate for AMA President-elect.

SOCIAL AND SPORTS

A full program of social and sports activities has been arranged for the Summit participant. In addition to events such as the Early Bird Social Hour and the Beer and Oyster/Wine and Cheese Party, a special ladies program has been developed. This program will include a Decorator's Show House Tour, a champagne showing at the Owen's Art Gallery and a luncheon and fashion show. For additional information consult the ladies program in this issue of *The Journal*.

A sports program sure to entertain the participant will also be held. The Annual Summit Tennis Tournament will be conducted at The Courts, NW 63rd & Broadway Extension. The Annual Summit Golf Tournament will be held at the beautiful new Oak Tree Golf Club in Oklahoma City.

EXHIBITS

As always a large number of exhibits will be on display at Oklahoma Medical Summit '77. The exhibit hall will be in the Skirvin Plaza Hotel, and each Summit participant is urged to visit the area. This year a special Pioneer Doctor's Exhibit will be displayed in a meeting room adjacent to the exhibit hall.

PIONEER DOCTOR EXHIBIT

This year Oklahoma Medical Summit will feature a unique Pioneer Doctor Exhibit representative of medicine and the way it was practiced during the 1890's-1920's. Significant items from the Doctor W. J. Risen Collection will be brought in and will be on display throughout the four-day meeting. Doctor Risen was a pioneer doctor who attended medical school in Kentucky during the 1890's and who set up his medical practice in Hooker, Oklahoma, in 1906. He joined the OSMA in 1908 and was very active in organized medicine. He was also a member of the Oklahoma Legislature, and his son, George L. Risen, operated the Pioneer Drug Store beginning in 1913. Items from the Risen medical practice and from the Pioneer Drug Store will be on display near the exhibit hall in the Skirvin Plaza Hotel.

PHOTO CONTEST SET FOR SUMMIT

A contest and display for the photographs taken by physicians and their spouses has been planned for Oklahoma Medical Summit '77 in

the Skirvin Plaza Hotel. In addition to having their photos on display, entrants may win cash prizes and/or ribbons.

All photographs entered in the contest will be displayed in the Medical Summit Exhibit Hall in the Skirvin Plaza Hotel's Imperial Ballroom throughout the four-day meeting.

Rules for the contest require that all entrants must be a member of at least one of the sponsoring organizations of Medical Summit, or the spouse of a member. The Summit sponsors are the Oklahoma State Medical Association, the Oklahoma Academy of Family Physicians, and the Oklahoma City Clinical Society.

Photos may be of any subject matter in either black and white or color. However, entries are limited to prints. Photos must be a minimum of 5 x 7 inches or up to a maximum of 16 x 20 inches. Maximum mounted or framed size should not exceed 24 x 28 inches.

A grand prize of \$100 will be awarded to the "Best of Show." Second and third place awards of \$50 and \$25 will be made for the best two black and white and two color photos. "Honorable Mention" ribbons will also be awarded. Although there is no absolute rule on number of entries, each participant is asked to limit his entries to no more than five.

All entries must be received by the Oklahoma State Medical Association no later than Monday, May 2nd, or entries may be brought directly to the Skirvin Plaza Hotel's Imperial Ballroom on Wednesday morning, May 4th.

Anyone wishing additional information about the contest should contact Ed Kelsay in care of the OSMA. □

TELEPHONE MESSAGE

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Oklahoma Medical Summit

'77 Exhibitors

The technical exhibits of Oklahoma Medical Summit '77
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Mead Johnson Laboratories
Marion Laboratories, Inc.
The Upjohn Company
Ayerst Laboratories
Mission Pharmacal Company
Rucker Pharmacal
Parke, Davis & Company
Eli Lilly & Company
The Jobst Institute, Inc.
St. Anthony Hospital
Milex Southern, Inc.
Delta X-Ray Company
Wm. H. Rorer, Inc.
Ortho Pharmaceutical Corporation
Burroughs Corporation
Schering Laboratories
Cope Enterprises
Oklahoma Home Health, Inc.
Reed & Carnick
Bolen Imports
Clark National Products
Physicians Formula Cosmetics
Electropedic Products
Melton Company
Epperson Photo Supply
Wang Laboratories
Riker Laboratories, Inc.
Flint Laboratories
US Army

PROGRAM

OKLAHOMA MEDICAL SUMMIT '77

Wednesday, May 4th

- 12:00 p.m. Oklahoma State Medical Association Board of Trustees Meeting
- 1:30 p.m. Oklahoma Academy of Family Physicians Board of Directors
- 3:00 p.m. Opening Session—OSMA House of Delegates
- 6:30 p.m. Early Bird Social Hour
- 7:30 p.m. Special Summit Party

Thursday, May 5th

- 7:00 a.m. Oklahoma City Clinical Society Meeting
- 8:00 a.m. OSMA Reference Committees
- 8:30 a.m. Exhibits Open
- 9:00 a.m. Occupational Therapy Meeting
- 10:00 a.m. Clinical Update—Biorhythm
Speaker: Charles Watkins
- 10:00 a.m. THE GREAT DEBATES
—Exercise: Prevention & Rehabilitation in Cardiovascular Disease?
Speakers:
Gunnar Blomquist, MD
Southwestern Medical School
Carl J. Rubenstein, MD
Oklahoma Medical Research Foundation
- 10:00 a.m. Oklahoma State Nurses Association Workshop
- 12:00 p.m. SUMMIT LUNCHEON
Speaker:
James H. Boren, author of *When In Doubt, Mumble*
- 1:00 p.m. Occupational Therapy Meeting
- 1:30 p.m. Oklahoma Dietetic Association Meeting
- 1:30 p.m. University of Oklahoma Medical Alumni Governing Board
- 2:00 p.m. Clinical Update
—Current Update in Pulmonary Function Studies
Speaker: Ray Dougherty, MD
- 2:00 p.m. THE GREAT DEBATES
—Estrogen: Should We or Shouldn't We?
Speakers:
Richard J. Worley, MD
Southwestern Medical School
Barry Schwartz, MD
Southwestern Medical School
- 1:00 p.m. OSMA Advisory Board
- 5:00 p.m. Keg & Oyster/Wine & Cheese Party
- 5:00 p.m. Exhibits Close

Friday, May 6th

- 7:30 a.m. OSMA Past-Presidents' Breakfast
 7:00 a.m. OAFP Membership Breakfast
 8:00 a.m. OAFP General Meeting
 8:30 a.m. Exhibits Open
 10:00 a.m. Clinical Update — Biofeedback
 Speakers:
 Marcus Barker, MD
 Ronald Seeborn, Ph.D.
 10:00 a.m. THE GREAT DEBATES
 —Allergy: Why & Where?
 Speaker:
 Raymond G. Slavin, MD
 St. Louis University Medical School
 12:00 p.m. Summit Luncheon and Installation of Officers
 Speaker:
 Frosty Troy, Editor
Oklahoma Observer
 2:00 p.m. American Medical Women's Association
 2:00 p.m. Clinical Update
 —Computerized Axial Tomography (CAT)
 Speaker:
 Harry J. Kearns, Jr., MD
 Oklahoma City
 2:00 p.m. NATIONAL BURN SEMINAR
 Speakers:
 Allen R. Dimick, MD
 University of Alabama
 Hugh D. Peterson, DDS, MD
 Institute of Surgical Research
 Brook Army Medical Center
 E. Ide Smith MD
 Director of Burn Unit
 Oklahoma Children's Memorial Hospital
 Moderator: Paul Silverstein, MD
 Baptist Burn Center
 2:30 p.m. Closing Session—OSMA House of Delegates
 5:00 p.m. Exhibits Close
 5:00 p.m. Presidents' Reception
 5:30 p.m. Oklahoma Anesthesiology Society
 —Cocktail Party
 7:00 p.m. Oklahoma State Association of Pathologists—Dinner
 7:30 p.m. Summit Dinner/Entertainment
 9:00 p.m. Summit Dance

Saturday, May 7th

- 7:00 a.m. OAFP Past-Presidents' Breakfast
 7:30 a.m. Foundation for Peer Review—Breakfast

8:00 a.m.	Oklahoma Allergy Society Breakfast
8:00 a.m.	Foundation for Peer Review Meeting
8:30 a.m.	Exhibits Open
8:30 a.m.	Oklahoma State Association of Anesthesiology Speakers: James M. McCormick, MD Hartford, Connecticut Carl J. Rubenstein, MD Oklahoma City
9:00 a.m.	Oklahoma Occupational Medical Association
8:30 a.m.	EXHIBITS OPEN
9:00 a.m.	Photo Clinic
9:00 a.m.	Mini-Session Sponsored by Oklahoma State Association of Pathologists
10:30 a.m.	Mini-Session Sponsored by Oklahoma Blood Institute
10:00 a.m.	Mini-Session and Meeting Sponsored by Oklahoma Allergy Society
10:00 a.m.	Professional Management Seminar
10:00 a.m.	Physician/Medical Assistants' Program
1:00 p.m.	Oklahoma State Association of Anesthesiology—Business Meeting
2:00 p.m.	Exhibits Close



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LADIES ACTIVITIES

Wednesday, May 4th

12:00 p.m. to 5:00 p.m.—Registration, Skirvin Plaza Hotel

Thursday, May 5th

8:00 a.m. to 5:00 p.m.—Registration and Hospitality

9:00 a.m.—Tour of Decorators' Show House

The Women's Committee of the Oklahoma Symphony announces its fourth annual Decorators' Show House. The Symphony has borrowed a large home located in the Heritage Hills Preservation area near downtown Oklahoma City, and various leading interior designers from the area will completely redecorate the interior for your inspection.

The Show House, loaned to the Symphony by Historical Preservation, Inc., was built in 1922 by Mr. and Mrs. Hugh Johnson. The two-story Mediterranean-style home was one of the showplaces in early Oklahoma City. After May 22nd, the Show House will become the Headquarters of Historical Preservation, Inc.

Tickets — \$2.50 in advance, \$3.00 at the door.

10:45 a.m.—Owen's Art Gallery, Champagne Showing, Santa Fe Plaza

For your pleasure, a private showing has been arranged featuring some of the newest and best work out of the Southwest (Santa Fe, Albuquerque, etc.). There are many other beautiful works of art in the gallery including wood and metal sculpture. The Owen's Gallery, located in the Santa Fe Plaza, is owned by Mabel Owens, one of our own doctor's wives. Be sure and attend this fun event.

12:00 p.m.—Optional luncheon with husbands

Speaker:

James H. Boren, President

International Association of Professional Bureaucrats

Friday, May 6th

8:00 a.m. to 12:00 p.m.—Registration and Hospitality

12:00 p.m.—Luncheon and Fashion Show

Fashions from Balliets

Special Guest—Mrs. Norman Gardner, President,
AMA Woman's Auxiliary

Tickets—\$7.50 payable in advance.

Pre-registration is encouraged as space is limited

Bus transportation from the Skirvin Plaza Hotel will be provided for the Decorator's Show House Tour.

AMA Testifies on Fraud and Abuse

Declaring that "the various provisions of H.R. 3 are so sweeping in their scope that their effect is . . . a blanket authorization to investigate the actions of almost every practicing physician in the country," Edgar T. Beddingfield, Jr., MD, recently presented the AMA's position on H.R. 3, the Medicare-Medicaid Anti-Fraud and Abuse Amendments.

Testifying at the second day of a joint hearing before the House Interstate and Foreign Commerce Health Subcommittee and the Health Subcommittee of Ways and Means, Doctor Beddingfield, Chairman of the AMA Council on Legislation, said that "while we support in principle the objectives (to halt fraud in Medicare and Medicaid) of the bill, because of its broad sweep H.R. 3 should not be adopted without substantial amendment."

AMA testimony stressed that existing laws already prohibited fraud in government programs and that what was needed was more support for investigative and prosecutorial staff to enforce these statutes properly.

Doctor Beddingfield pointed out that the requirements in H.R. 3 for disclosure of a wide variety of financial and ownership information would affect all group practices in this country because the definitions of "supplier" and "shared health facility" were so broad in their terms. These provisions should be changed, he said.

Doctor Beddingfield also noted that the bill was unclear in another of its features. "We question how the bill specifically addresses the problem of reaching the entrepreneur — the one (often not a physician) who behind the scene is responsible for putting together the 'Medicaid mill'. It is the entrepreneur's desire for profit that leads to the creation of many 'Medicaid mills' and it is not clear how this bill deals with these instigators. So long as such entrepreneurs remain untouched, fraudulent practices will be encouraged."

H.R. 3 would significantly amend the PSRO law, mandating review of outpatient physicians' services among other changes. The bill would amend the PSRO law to permit the PSRO to abstract information from physician records, and to expand disclosure obligations by requiring the PSRO to provide, either on request or on its own initiative, to state and federal agencies responsible for investigating fraud and abuse such information as would as-

sist enforcement agencies. Doctor Beddingfield observed that "the PSRO would be less of an educational and quality review mechanism and become more nearly an investigate arm of law enforcement agencies." These provisions, he urged, should not be adopted.

Also testifying was newly appointed US Attorney General Griffin Bell who, in a short statement, pointed out that "what is needed to deal with this problem (Medicare and Medicaid fraud) is not major new legislation but a commitment to maintain and protect the integrity of these programs." Bell told the Subcommittee that "while this (anti-fraud) program is of high priority, it must be considered in the context of all of the other items that place enforcement demands on the Executive Branch.

"HEW alone has over 380 programs costing over \$130 billion subject to fraud and abuse. Numerous other agencies have similar problems and we are working with all of them. The Department of Justice also has pressing obligations in the other white collar crime areas of consumer fraud, corporate misconduct, corruption, organized crime and drug law enforcement." □

Public Confidence in Federally Run Health Plan Declines

There has been a significant decline in the number of Americans who want to see a national health care plan administered and controlled by the federal government. At the same time there has been an increased interest in having health care administered by local organizations.

These are the findings of a Gallup Survey made public this past winter. The poll compared public attitudes toward various proposals for delivery of health care in 1972 and in 1976.

The question asked of those polled in 1972 and again in 1976 was:

"Congress may soon pass some form of national health insurance partly paid for out of taxes. Who would you prefer to run this program?"

Four years ago 40 per cent of those polled said they would prefer the federal government. In 1976 this figure dropped to 28 per cent.

In 1972, 13 per cent favored a health plan run by local citizen organizations and doctors. This figure increased to 20 per cent in 1976.

Those favoring a program run by local government increased from 7 per cent to 11 per cent in the four years. Preferences for state government or insurance company supervision remained about the same.

Another key question in the poll asked:

"Which health care system do you think would be the best way to provide adequate medical and health care for all people?"

The largest proportion, 39 per cent, favored a system of compulsory health insurance covering everybody who has a job and his or her family, with employers and employees sharing the costs, and the federal government providing health insurance only for people who do not have jobs. This figure varied only 1 percentage point in four years.

However, the survey shows a decline in support for "the present system of voluntary medical care" and an increase in support for a universal system paid through taxes. Support for the present system declined by 5 percentage points between 1972 and 1976 (from 30 to 25), while support for a universal system increased by 6 percentage points (from 22 to 28).

Nonetheless a mixed system is still favored by most Americans. If those favoring the present system (25 per cent), is added to those who favor the public/private alternative (39 per cent), there are two in three (64 per cent) preferring a combination system of public and private participation.

Both surveys were conducted among representative national samples of 1,500 respondents by personal interview. ☐

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PAUL D. ERWIN, MD 1923-1977

Paul D. Erwin, MD, Oklahoma City general and thoracic surgeon, died March 16th, 1977. A native of Wellston, Oklahoma, Doctor Erwin was graduated from the University of Oklahoma College of Medicine in 1946. He was active in civic and medical affairs and held memberships in the Oklahoma City Surgical Society, the Southwest Surgical Conference, the Southern Medical Association and was a Past-President of the Oklahoma City Clinical Society.

FRANK J. MARTIN, MD 1918-1977

An Ada, Oklahoma, internist, Frank J. Martin, MD, died March 14th, 1977. Born in Andale, Kansas, Doctor Martin received his medical degree from the University of Kansas School of Medicine in 1944. Following service with the Army Medical Corps, he took his residency training before establishing his practice in Ada in 1949. He remained in Ada until his retirement in December, 1975.

RAYMOND G. JACOBS, MD 1904-1977

A long-time Enid physician, Raymond G. Jacobs, MD, died February 22nd, 1977. A 1928 graduate of the University of Iowa College of Physicians and Surgeons, Doctor Jacobs established his practice in Enid following a four-year residency in St. Louis. He was a Fellow of the International College of Surgeons and the American College of Surgeons.

In 1974, the Oklahoma State Medical Association presented him with a Life Membership for over a half-century of devoted service to humanity and his profession. ☐

Malpractice Bills Introduced

Among the principal medical bills now pending before the Oklahoma Legislature are three measures which would strengthen the state's current professional liability statutes. All three of the bills were included in the OSMA's reform package last year, but each was stricken during committee hearings. The three measures now assigned to various Senate committees were introduced by Senator Phil Watson (R-Edmond). They are as follows:

SB 298 Counter-claims . . . This bill now being considered by the Senate Committee of Judiciary provides that in any malpractice proceeding, the defendant may file a counter-suit and have it tried concurrently. A precedent for this was established in Illinois last year when a physician counter-sued the plaintiff for filing a non-meritorious lawsuit and won.

SB 299 Guaranty and Warranty . . . This bill simply provides that no liability shall be

imposed on a "health care provider" based upon an alleged breach of warranty, guaranty or contract, unless it is in writing and signed by the provider.

SB 300 Collateral Sources . . . This bill, which is pending before the Senate Committee on Judiciary, is designed to prevent what is in effect double payment. It provides that in malpractice proceeding, information relating to damages or losses paid by other sources (private insurance) shall be admissible in court. The legislation does not preclude the jury from awarding double payment, but simply says the jury has the right to know.

Also currently pending are bills dealing with emergency medical services, the use of laetrile in the treatment of cancer patients, optometrists and their use of diagnostic and therapeutic drugs, and the use of hospital outpatient facilities by chiropractors. The OSMA Legislative Committee is watching each of these measures closely. □

BOOK REVIEW

REYE'S SYNDROME. J. D. Pollack, Editor. 470 pp. New York: Grune and Stratton, 1975. Price not given.

This monograph is the proceedings of the Reye's Syndrome Conference held at the Children's Hospital, Columbus, Ohio. The only reference as to when the Conference was held (in 1974) is a small notation, which is easy to overlook, on the page containing publication details. There are 72 contributors to this volume. The contents are divided into six major sections entitled as follows: I. Diagnosis of Reye's Syndrome; II. Pathology of Reye's Syndrome; III. Etiologic and Metabolic Aspects of Reye's Syndrome; IV. Therapy and Management of Reye's Syndrome; V. Panel Discussion: Performing the Liver Biopsy in Reye's Syndrome; and VI. Summation of the Conference. Each section is divided into invited papers and free papers and each section is followed by a general discussion.

In the section on diagnosis of the syndrome, there is a discussion based on the clinical findings and on the laboratory diagnoses. There are eight papers dealing with the pathology of the disorder including reviews of the ultrastructure of the liver and central nervous system. Perhaps the most interesting section is that concerned with the etiology of the disorder. The discussion ranges from the possible

causal relationship of viruses to the role of various toxins as well as the possible interaction of these two causes. Despite the great surge of interest in this disorder in recent years, the etiology remains unknown. There is extensive discussion of the metabolic changes including recent findings about the concentration of serum and tissue lipids and alterations in various electrolytes. The section on treatment contains eight papers which review various methods of management including peritoneal dialysis, exchange transfusion, monitoring of intracranial pressure, and L-citrul-line therapy. Treatment is still supportive rather than definitive.

The monograph, although written in attractive style, is rather difficult to read because all of the references are listed chronologically at the end of the book so that the reader must turn from each citation in the text to the bibliography at the end of the book to look up the appropriate reference.

This monograph provides a comprehensive summary of knowledge available at the time of the conference concerning Reye's syndrome. It will be of interest to pediatricians and other physicians and investigators concerned with this disorder, which continues as an important, enigmatic disease of childhood. *Harris D. Riley, Jr., MD* □

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What's Your Tolerance?

When you've had enough, quit. Decide now how much bureaucratic interference and governmental subordination you will tolerate and, when the interference and subordination surpass your limits of tolerance, quit practicing medicine. Don't go on strike. Don't suffer or publicize your indignation. Don't rage or make loud noises. Just quit.

If you are one blessed with unlimited tolerance for subjugation and manipulation, you should be making plans to see more patients in less time with fewer assistants and for lower fees. You should plan to dispense with vacations and spend more time in continuing-education activities. In addition, you will need to prepare for a number of periodic competency tests. Judges, legislators and other politicians as well as a variety of laymen will exercise an increasing authority over your practice but none of them will share your responsibilities or mitigate your liability. In short, you will be told how you must establish a diagnosis, how you treat an illness, which drugs you can use and which drugs you cannot use and how much you can charge — not for your time or your education or your skill or your capital investment or your assumption of liability — but for the treatment of a specific illness.

Whether or not you have limits of tolerance, if you believe such levels of subordination are too extreme, exaggerated or remote, you are naive or stuporous. Every one of the restrictions described has already been enacted and you are tolerating them. Their impact has, however, by deliberate political design, been retarded so as not to generate resistance.

Avoiding the invidious is the very essence of seduction; the hallmark of the demagogue.

So now we have but one decision left to make. How much subordination will we, as physicians, as members of an honorable profession, as free citizens in a supposedly free society, tolerate? Each of us must make this decision and make it now. Already, it is late.

Already insurance companies are asking what is meant by the term "Professional Services." Already the Secretary of Health, Education and Welfare has slandered many of our colleagues by publicizing inaccurate information about their incomes. Already some anonymous voice from the President's cluster of confidants has whispered a proposal to place a limitation on our fees.

If you find the limits of your tolerance in any of these prevailing or predictable indignities it is time to tell your patients. They deserve to know because it is only they who might forestall the impending disaster of medical care by fiat or, perhaps, no medical care at all. So tell them, once you have decided which indignity is more than you can honorably tolerate, when you are going to quit.

Maybe, by the slimmest of chances, if your patients knew for a fact that you would quit practicing medicine the very day that, for example, your fees are limited by law or by decree, our lawmakers might hear something besides the murmuring of the polluted Potomac. And maybe, once they hear from our patients, we might win a battle if not the war.

Naturally, if such a campaign should fail, you will be forced to find another job. And here, a word of advice: Next time, join a *real* union and work as a genuine professional. You'll be glad you did. *MRJ*

I look forward to the coming year as President of the Oklahoma State Medical Association with enthusiasm. I am following an outstanding President, Orange Welborn, who has given of himself, often to the point of personal sacrifice, to make the OSMA a more viable, workable organization. We owe him a debt of gratitude.



The theme for the coming year will be *better patient care*.

Simply stated, the function of the physician is to take care of people, to restore them to health when they are ill or injured, and to keep them well through effective preventive medicine.

Physicians organize into national, state, county and specialty medical societies for the purpose of taking *better* care of their patients. As I see them, the fundamental objectives of organized medicine are:

1. To assure the right kind of care is provided at the right time and in the right place to the greatest number of people;
2. To help provide a setting for the doctor to look after his patients in a secure situation with the least professional strain;
3. To educate both physician and patient — the physician so that he can render competent scientific care with human compassion, the patient so that he will intelligently seek a quality of life in which good health is the keystone.

The United States has the best system of health care in the world, and Americans receive more and better medical services than anyone. That is not to say that our system does

not have its faults or that it cannot be improved. Certainly, much of the enormous effort of American Medicine is being expended in seeking practical solutions to these problems.

Unfortunately, the American people do not realize the superiority of our system of medical care. The monumental accomplishments and progress of our system have been obscured by politically motivated attacks which propose to substitute a system with alien concepts that have significantly failed in other parts of the world. Much of this lack of understanding has been due to our own apathy and an inadequate job of patient communication and medical public relations.

In the year ahead, Oklahoma State Medical Association will seek to reach this paramount goal — *to take better care of our patients* — by a comprehensive and objective program. It will be planned and implemented by the officers, committees and councils, and in the last analysis by you, the member. This will include continuing medical education, a greater participation in health care planning, expanded public relations activities, a constant monitoring of the problems of professional liability insurance and medical legislation, improved socioeconomic training for physicians and their employees, intraprofessional relationships, and increased membership services.

I am grateful for the privilege of serving as President of Oklahoma State Medical Association, but fully cognizant that whatever can be accomplished will be through your active participation and support.

Sincerely,

C. S. Lewis, Jr. M.D.

The Continuing Controversy— Who Should Have a Mammogram?

RALF E. TAUPMANN, MD

After the smoke of controversy has cleared the experts now think it is worthwhile to judiciously screen females for breast cancer. Guidelines and discussions are set forth in the following article.

Early diagnosis of breast cancer is tantamount to increased survival rates. The medical community has made great strides in early detection by making use of such modalities as, initially, x-ray mammography, and more recently xeroradiography, low-dose x-ray mammography, adjunct thermography, and breast self-examination; which is and should be a mainstay of yearly follow up.

Unfortunately recent adverse publicity about increased incidence of breast cancer with repeated breast examinations by ionizing radiation has dealt a setback to the medical community as well as to women who may harbor an undetected cancer, but are now afraid to submit to any form of detection. Perhaps, a closer look at what has transpired is in order.

The BIER¹ (The Biological Effects of Ionizing Radiation) report first aroused attention and articles by Bailar and others set the stage for the resultant turmoil fueled by the lay press and our "consumer advocate" Nader, which left the primary physician, surgeon, and especially the patient in limbo as to what to do. More confusion has arisen from mammography guidelines, which have served more to confuse than clarify the issue. It should be kept in mind that the National Cancer Institute (NCI) guidelines are not regulatory but advisory.

Contained in the above-mentioned articles are mainly three studies: (1) An article showing increased breast cancer in women exposed to the atomic bomb at Hiroshima.² (2) Increased breast cancer in women who had extensive fluoroscopy secondary to pneumothoraces for tuberculosis.³ (3) Increased incidence of breast cancer in women who were treated for postpartum mastitis by radiation therapy.⁴

It should be borne in mind that these patients received large doses of radiation, often in the same order as given with radiation therapy. The women who received extensive fluoroscopy had so much radiation that they developed erythemic skin reactions, receiving as much as 4,000 rads to the breasts. The

reader should keep in mind, however, that except for the radiation for mastitis cases where exact calculated doses were given, the radiation amounts women received at Hiroshima and the women with repeated fluoroscopy are only retrospective estimates.

Dr Bailer⁵ tends to rely too heavily on these figures in his article making hypothesis sound more like fact. At the present time, there are no realistic "risk-benefit evaluation factors" or curves that give us real answers; hence some of the controversy and confusion.

In a more recent article Dr Lester Breslow of UCLA made the statement that more breast cancer would be caused than detected. Again, this comment is rather unfounded and premature.

What is the comeback to all of this? A look at what has been accomplished, the modalities used and their advantages and disadvantages may be in order.

X-RAY MAMMOGRAPHY

Mammography utilizing conventional x-ray is the oldest breast cancer screening modality utilized today. As early as 1929 Warren⁶ reported 58 malignancies detected in 119 cases examined. Several reports describing the value of breast radiography appeared in the 1930's and 40's. However, it was not until 1960 when Egan⁷ reported 1,000 consecutive x-ray examinations of the breast, that x-ray mammography became recognized as a valid diagnostic and screening device by both radiologists and surgeons. Gershon-Cohen⁸ conducted a five-year survey and reported a case finding rate of 17.5 per 1,000. They also demonstrated lesions which were nonpalpable and asymptomatic. Early diagnosis of breast cancer seemed to be a definite feasibility. In 1973 the American Cancer Society (ACS) and the NCI jointly funded 27 breast cancer screening centers across the nation to evaluate the feasibility of screening large numbers of female volunteers over the age of 35.

Moskowitz⁹ has screened 4,128 patients at the University of Cincinnati as one of these projects and has verified 36 cancers in this group of asymptomatic women, or eight per 1,000. Fifty-three percent of these were described as minimal disease and another 39% were described as in situ lesions. Only 8%

were more advanced. This is in contrast to historical control groups in the same institution whereby 2% were classified as in situ, 53% Stage I, and 44% Stage II. Preliminary figures of the 27 demonstration institutions showed 532 of the first 669 (79%) cancers detected to have no involvement of axillary lymph nodes.

Shapiro¹⁰ ascertained the lead time in early diagnosis to be seven months at the first examination, but 11-13 months in subsequent years.

Routine use of mammography is not without some risks in that it involves ionizing radiation. The radiation exposure of conventional x-ray mammography varies from 1-to-3.5 rads per exposure, which is rather high and with today's newer methods quite unacceptable.¹¹

LoDose mammography has come under close scrutiny by Ruth Snyder¹² and also Richard H. Gold¹³ who point to definite advantages over the conventional x-ray mammography and even xerography. The LoDose technique exposed the patient to one rad or less, versus 1.5 to 3.5 rads per film for xeroradiography or conventional x-ray mammography. The author's personal experience has been 1.4 rads per exposure initially, but which when filtered with additional 1.5 to 3.0 mms of aluminum could be reduced to 0.5 rads and below. Conventional x-ray mammography is still being used in many parts of the country and in competent hands yields good clinical information. Without filtration or utilizing the LoDose technique, the radiation dose is high and appears to be a disadvantage and should be discouraged.

LoDose mammography reduces radiation considerably to where a total examination of four views can be performed with less than 1 rad total exposure. These examinations according to some authors are slightly harder to read and cause some eye fatigue when compared to xeroradiographic images. Both the LoDose mammography and xeroradiography require a special unit which can be a disadvantage.

XEROGRAPHY

The xerographic process utilizes a special aluminum plate coated with a thin layer of Selenium, a semiconductor which is positively charged before use. The plate is housed in a light-tight cassette. Conventional x-ray

of low kilovoltage is used to make the exposure producing a positively-charged latent image on the plate. This image is developed by exposing it to an oppositely-charged powder and transferred to a special paper for permanent viewing and storage.¹⁴ Xeroradiography received medical interest in 1955 and again in the early 1960's with thoughts of mass screening. The advantages are daylight processing and relatively high accuracy with room light viewing. The images present less eye fatigue to the examiner and processing time is a mere 90 seconds. Radiation exposure is approximately one to four rads per procedure depending on the type of equipment and exposure factors used. Additional filtration with up to 3.5 mm of aluminum has reduced radiation exposure to below 0.5 rads per exposure; this, however, also carries with it a certain reduction in sharpness of the radiographic image rendering it "flat."¹⁵ However, the images are still adequate and readable. Dr John Wolfe utilizes negative mode images which give a dose reduction of 30% which is certainly advantageous.¹⁶ The xerographic equipment has occasional breakdown time which can be disconcerting, especially with rescheduling of out-of-town patients.

Originally Wolfe¹⁷ and more recently Peyser¹⁸ have devised the classification of risk for developing cancer by the appearance of the breast parenchyma on mammograms. Wolfe classifies the typically fatty breasts with few fibrous strands, mainly in older women as N¹ — lowest risk. A fatty breast with few remaining subareolar ducts as well as a few ducts in the upper axillary quadrant as P₁. His P₂ group shows more severe involvement with the ducts arranged in a triangular disposition in the central portion of the breast. Usually more than half of the breast appears involved. Connective tissue parenchyma producing coalescence is noted. DY—A general increase in density of breast parenchyma with prominent ducts comprises

this high risk group. Graduation from N₁ to DY connotes an increasing risk for breast cancer. Wolfe followed some patients for over seven years and noted higher rates of breast cancer in the P₂ and DY groups. Peyser's study concurs with those of Wolfe, although Peyser's follow up has not been quite as long in time as Wolfe's. Women in the low risk group P₁-P₂ should probably have fewer mammograms at longer time intervals. Patients in the P₂ and DY groups are at a higher risk and should be checked more often and watched more closely.

THERMOGRAPHY

Thermography is a non-invasive technique making use of the natural invisible infra-red emission of the human body. This emission is translated by electronic integration to a visible display on an oscilloscope which can be filmed for ready interpretation.¹⁸ Lawson,¹⁹ in 1956, observed altered thermal emissions in patients with breast cancer. Other common benign lesions such as fibroadenomata, papillomata, fibrocystic disease, sclerosing adenosis, plasma cell mastitis, pregnancy and other states can cause alteration in the venous flow giving abnormal or suspect thermograms. False-positive rates can run as high as 40%. It has also been shown that the early lesions can have a false-negative rate.²⁰ However, when combined with a physical examination a higher true-positive rate may be anticipated. The ACS/NCI centers have not found thermography entirely valuable in detecting nonpalpable or early lesions. Several authors conclude that thermography should not be used as a definitive diagnostic tool, but rather in conjunction with a physical examination and mammography. This has also been set forth as policy by the American College of Radiology and the American Thermographic Society.²¹ In competent hands and with improved refinements it may prove to be a valid aid in the detection of breast cancer at some future time.

Two other modalities for detection and better delineation of breast tumors are waiting in the wings; these being computerized axial tomography (CAT)^{22, 23} which is in its infancy and still fraught with problems although showing promise. The CAT technique uses ionizing radiation and the exact measurements as to skin dose levels are not available as yet.

Since his graduation from the University of Texas Medical Branch at Galveston, Ralf E. Taupmann, MD, has been certified by the American Board of Radiology. Doctor Taupmann is a Diplomate of the American Board of Radiology and a member of the Radiologic Society of North America, the American Thermographic Society and the Postgraduate Assembly of South Texas.

The other method is ultrasound which is an adjuvant to mammography and helps in differentiation of cyst vs. solid mass and needle guidance for cyst aspiration. The ultrasound technique is not invasive and has practical application.

Loy²⁴ points out that a cyst has a firm posterior wall and the margins are more sharply delineated. A solid lesion has no firm posterior wall. Kobayaski²⁵ differentiates a benign from a malignant lesion pattern by its function of acoustic impedance. It should be emphasized that ultrasound is not a sole screening modality for cancer detection but should rather be used as a differentiating tool.

SPECIMEN MAMMOGRAPHY OR XEROGRAPHY

The ability to detect smaller tumors (2 mm) as well as the minute tumor calcifications necessitates precise localization of such "finds" for the surgeon as well as the pathologist. The radiologist plays a vital role in specimen mammography or xerography. A specimen in question should be sent to the X-Ray Department or Pathology Department for further localization to insure an adequate biopsy and to help the pathologist select areas for sectioning.

Pre-operative discussion as to the exact location and proposed biopsy site between radiologists and surgeons is of great help. The radiologist should always have the previous mammogram available to ascertain the right area and should be certain that the suspicious findings in question are in the biopsy specimen.

Initially the surgeons as well as the pathologists were skeptical, but with proper education the multi-disciplinary approach will provide greater benefit to the patient.

Several techniques for localizing occult breast cancer as detected by mammography have been described. Egan²⁶ utilizes needle injection of a blue dye with the aid of mammography. A small blue tract is left when the needle is withdrawn towards the skin giving the surgeon a marker to follow. Others have inserted needles with radiographic assistance, leaving them in place for surgical excision. More recently a thin-walled 18-gauge needle with a barbed stylet bent toward the short bevel of the needle has been utilized. After

localization the barbed stylet is hooked in place while the needle is withdrawn.

HIGH-RISK GROUP

It is obvious that we cannot (nor should we) at this time screen every female over 35 years of age in this country with a breast examination, mammography and thermography. It would take a large task force and an enormous outlay of funds to screen the estimated 38,000,000 women over the age of 40 in the United States. Selective screening of women at higher risk for subsequent development of breast cancer would appear to be much more feasible.

Epidemiologic studies have identified several factors influencing the risk of breast cancer. Listed below are factors that are associated with an increased risk:

1. The nulliparous female over age 30.
2. The late first pregnancy. Women over 30 years of age who become parous for the first time have a higher risk of breast cancer than nulliparous women. This is particularly true if the late first pregnancy is associated with relative infertility.
3. A prolonged active menstrual life with either an early menarche or a late menopause are also factors. Thirty or more years of menstrual activity increases the risk. Artificial menopause before the age of 35 years is associated with a 40% reduction in risk.
4. Family history of breast cancer particularly when present in first degree kinship. This is more true for cancers occurring in the early pre-menopausal group rather than the peri- or late post-menopausal group of patients.
5. Females with fibrocystic disease especially those having had epithelial dysplasias are at high-risk.
6. Race—Jews with northern European ancestry have an increased risk with the risk being more in Caucasians, than Blacks more than Orientals.
7. Obesity.
8. Hypothyroidism and patients having had thyroidectomies.
9. Diabetes mellitus.
10. Previous history of endometrial, ovarian or colon cancer.
11. Family history of endometrial, ovarian, or colon cancer.^{27, 28}

GENETICS

Cancer-prone families are being studied intensively for possible genetic links. A mendelian autosomal dominant genetic factor appears to be present in some families. Genetic heterogeneity has also been repeatedly observed in several different breast-cancer-prone families. Environmental factors, endocrine factors, and on cogenic viruses probably also play a role in interaction with host susceptibility.²⁹⁻³⁶

Guidelines set forth by the American College of Radiology are as follows:

1. All women should have annual physical examination of the breasts and be taught breast self-examination.

2. For asymptomatic women the first, or baseline, mammographic examination should be performed between the ages of 35 and 40.

3. Subsequent mammographic examinations should be performed at one- to three-year intervals unless more frequent examination is medically warranted.

4. After age 50, annual or other regular interval examinations, including mammography, should be performed.

5. Although the carcinogenic effects of radiation at current levels of exposure are probably immeasurably small, continuing attempts to reduce exposure should be made. However, image quality must be preserved for accurate diagnosis to insure the best risk/benefit (cure) ratio.

6. Each radiologist should assure the periodic monitoring of his equipment and procedures to determine that the patient's exposure is being maintained at the lowest feasible level.

CONCLUSION

At the present time there seems to be a consensus that the risks from routine mammography appear less than the natural changes of developing breast cancer. Dr Arthur Upton at the most recent National Conference of Breast Cancer in Houston, Texas cautioned that not enough facts and figures are available for a definite risk/benefit ratio. He further pointed out that the statistical information about the presumed risks from radiation exposure through periodic x-ray screening mammograms over several years is fraught with uncertainty and filled with extrapolation.

Moskowitz points out that there is an 8% lifetime risk for every woman after developing breast cancer with a 47% 20-year survival if nothing is done. The lifetime risk when given one rad per year goes to 8.5% but a 71% chance of survival is possible. Moskowitz also presented a table which shows annual breast exams with one rad per year in 100,000 female population vs other risk factors.

	Females 100,000	No. Deaths at 30 yrs.
30 Annual Breast Exams/1R/1yr	100,000	1.5-14
Accidental Deaths	100,000	180
Cigarette Smoking 1-1½ pack/day	100,000	1,000

Dr Richard Koslow of the NCI gave the latest figure of 262,848 women screened at the 27 national screening centers and pointed to 99 cancers found by mammography alone in the 35-49-year age group out of a total of 1,833 in the total age population.

It seems that mammography is worthwhile. Indiscriminate use should be discouraged. Quality control and reduction of radiation are the duties of the radiologists who are more than "over-radiation conscious" after the most recent controversy about mammograms.

Suggested is breast self-examination monthly with an annual physical and mammography to be done when positive physical findings are evident. The primary physician should be aware of the high risk groups as elucidated above and the recommendations of the American College. He then should advise the women as to what he recommends. It is also clear that we are after the breast cancer that is still in its localized form without nodal metastasis because this is the cancer that is most apt to be cured. Women in the age group of 35-50 unfortunately are in this age group.

So Soldiers of St. Agatha continue the fight!*

*St. Agatha is the patron saint of the breast who at an early age was martyred and tortured to death by brutal removal of both her breasts.³⁷

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The Role of Ampicillin in Treatment of *Hemophilus Influenzae* Meningitis

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Ampicillin has been the treatment of choice for meningitis and other infections due to Hemophilus influenzae. Recently, strains resistant to ampicillin have emerged which, along with the increasing incidence of Hemophilus influenzae infections, has produced a problem of large proportion and importance.

Ampicillin, a semi-synthetic penicillin, is active against a wide variety of both gram-positive and gram-negative bacteria, including *Neisseria meningitidis*, *Diplococcus pneumoniae* and *Hemophilus influenzae*. It became available for clinical investigation in 1960. The broad-spectrum of antimicrobial activity suggested that ampicillin might be of value for the initiation of treatment for purulent meningitis in children beyond the neonatal period, as well as for the total therapy of *H. influenzae* meningitis.

In 1963, investigators at the University of Southern California began clinical trials with

parental ampicillin for the treatment of children with *H. influenzae* meningitis.¹ Their results were comparable to those obtained with conventional therapy, including chloramphenicol therapy. Although ampicillin was not therapeutically superior to chloramphenicol, the risk of chloramphenicol-induced bone marrow toxicity was avoided with ampicillin therapy. Subsequently, additional reports appeared^{2, 3, 15, 20} confirming the findings of Ivler, *et al.*¹

In 1968, Young *et al.*⁴ reported the first bacteriologic relapse in a patient following treatment of *H. influenzae* meningitis with ampicillin. Subsequently, several additional reports of such bacteriologic failures or relapses have appeared.^{5, 6, 11-13, 16, 17, 19}

The purpose of this report is to review the current status of ampicillin in the treatment of *H. influenzae* infections with special attention to meningitis.

In Vitro Antibiotic Susceptibility Studies: In vitro susceptibility studies performed early after the introduction of ampicillin for clinical use showed that the three most common etiologic agents of meningitis in childhood were quite susceptible to ampicillin. (Table 1) *H. influenzae* was inhibited by ampicillin at concentrations ranging from 0.4 to 1.6 $\mu\text{g/ml}$ with 90% of the strains susceptible at a concentration of 0.4 $\mu\text{g/ml}$. *N. meningitidis* and *D. pneumoniae* were equally susceptible to ampicillin and penicillin G. The results of a study reported in 1972 indicates that there has been

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TABLE 1

IN VITRO SUSCEPTIBILITY (MINIMAL BACTERICIDAL CONCENTRATION) OF ORGANISMS WHICH FREQUENTLY CAUSE MENINGITIS TO VARIOUS AGENTS*

	MBC ($\mu\text{g/ml}$)	Ampicillin % Suscept- ible	Penicillin G % Suscept- ible	Chloram- phenicol % Suscept- ible
<i>H. influenzae</i>	0.4	90	55	30
	0.8	98	85	75
126 strains	1.6	100	100	95
	3.125			
<i>N. meningitidis</i>	0.4	95	90	35
	0.8	98	85	75
72 strains	1.6	100	96	90
	3.125		98	93
	6.25		100	95
	50.			100
<i>D. pneumoniae</i>	0.4	90	90	35
	0.8	95	90	60
37 strains	1.6	100	100	88
	3.125			90
	6.25			100

*Modified from Ivler *et al*¹

no change in the susceptibility of *H. influenzae* to ampicillin since the introduction of this antibiotic into general use.⁷ All reported strains of *H. influenzae* were susceptible to ampicillin in a concentration of 1.6 $\mu\text{g/ml}$ or less until recently.

At Children's Memorial Hospital, between January 1, 1967, and June 1, 1969, two-fold dilution sensitivities were performed on 26 *H. influenzae* type B isolates, 15 of which were obtained from cerebrospinal fluids (CSF). (Table 2) The mean minimal inhibitory concentration (MIC) was 0.39 $\mu\text{g/ml}$, but two isolates required 50 $\mu\text{g/ml}$ of ampicillin for inhibition of growth. Both patients from whom the "resistant" strains were isolated were successfully treated with ampicillin.

Between July 1, 1969, and June 30, 1974, 115 strains of *H. influenzae* type B were iso-

TABLE 2

IN VITRO SUSCEPTIBILITY OF 26 ISOLATES OF *H. INFLUENZAE* TO AMPICILLIN AND CHLORAMPHENICOL

	Susceptibility ($\mu\text{g/ml}$)						Total Isolates
	0.19	0.39	0.78	1.56	3.12	50	
Ampicillin							
CSF Isolates	2	8	2	1		2	15
Other Isolates		5	1	3	1		10
Chloramphenicol							
CSF	1	6	5	3		1	16
Other Isolates	1	5	2	1	1		10

lated from patients at Children's Memorial Hospital: 69 of these strains were from CSF and 20 from blood streams. Of these 115 strains, 113 were susceptible to ampicillin by the disc technique. Fifty-three of these strains were tested by tube dilution method. Of the 53 strains, 49 were from CSF, three from blood and one from another source. Forty-six of the strains had MIC of 3.12 $\mu\text{g/ml}$ or less to ampicillin; the MIC was 6.25 $\mu\text{g/ml}$ for two strains, 25 $\mu\text{g/ml}$ for one and 100 $\mu\text{g/ml}$ for the remaining one.

It should be recalled that *H. influenzae* behaves in a very unpredictable fashion in antibiotic susceptibility testing and there may be discrepancies observed between the in vivo and in vitro results.^{14, 22, 31} Guidelines in the conduct of in vitro susceptibility testing with ampicillin have been provided.^{14, 28, 31, 34, 36}

Comparative Clinical Trials: Mathis *et al.*⁸ reported the results of controlled clinical trials of ampicillin in the treatment of suppurative meningitis in 1965. In these studies, ampicillin was compared randomly with a control drug: chloramphenicol for *H. influenzae* and penicillin for *D. pneumoniae* and *N. meningitidis*. There were no positive cerebrospinal fluid cultures after 24 hours of ampicillin therapy in any of the treatment groups (Table 3), including 66 patients with *H. influenzae* meningitis. Of 107 *H. influenzae* cases treated with chloramphenicol, 5.6% had positive cerebrospinal fluid cultures after 24 hours of therapy. Outcome in terms of morbidity and mortality was not significantly different between ampicillin and the control drug in any of the three treatment groups.

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TABLE 3
RESULTS OF THERAPY IN ACUTE BACTERIAL MENINGITIS*

Bacterial Etiology	Treatment Regime	Number of Patients (398 total)	Response			Outcome		
			Persistent Fever	Subdural Effusions	CSF Culture Pos. at 24 hr.	No. Sequelae	Sequelae	Fatalities
<i>H. influenzae</i>	Ampicillin	66	14.4%	7.6 %	0%	85%	9.0%	6.0%
	Control	107	12.3	11.3	5.6	80.4	10.3	9.3
<i>N. meningitidis</i>	Ampicillin	56	5.3	3.6	0%	80.4	14.3	5.3
	Control	77	11.4	2.6	0%	82.0	9.1	9.1
<i>D. pneumoniae</i>	Ampicillin	41	12.4	7.3	0%	58.2	19.5	22.0
	Control	42	26.2	4.7	7.1	52.5	19.0	28.7
Ampicillin: 150 mg/kg/day, by rapid intravenous infusion every 4 hours for two to three days.								
Penicillin G: 150 mg/kg/day, by continuous intravenous infusion for two to three days; then same dose intramuscularly.								
Chloramphenicol: 100 mg/kg/day, by rapid intravenous infusion every 4 hours for two to three days; then same dose given intramuscularly.								

*Modified from Mathies *et al*⁸

Others have now carried out comparative clinical trials of the efficacy of ampicillin and chloramphenicol therapy in *Hemophilus influenzae* meningitis. Schulkind, *et al.*²⁰ compared the clinical courses of 37 patients treated for *H. influenzae* meningitis with either ampicillin or chloramphenicol. The only significant difference noted in the courses of the two groups of patients was a prolonged duration of fever in the ampicillin-treated patients. The prolonged febrile course was not accompanied by any evidence that the antibiotic had failed to eradicate the infection. Neither could the fever be explained in the basis of subdural effusion, intercurrent infections, phlebitis, or drug fevers. The mortality rate and the incidence of neurological sequelae were the same for both groups of patients.

Shackelford, *et al.*²¹ compared retrospectively the effect of ampicillin and chloramphenicol therapy for *H. influenzae* meningitis. The 136 ampicillin recipients and 116 chloramphenicol treated patients proved to be well-matched in relation to age, duration of

symptoms before fever, and initial cerebrospinal fluid findings. Fever was prolonged in a significant number and was of greater magnitude in ampicillin recipients. No significant differences were apparent in mortality of infection or associated complications except for bacteriologic relapse, which occurred in six ampicillin recipients, some of whom received ampicillin intravenously in high doses for a prolonged time. Four additional ampicillin recipients had slow bacteriologic response. Low spinal fluid ampicillin concentrations were documented in patients receiving ampicillin in a dose of 300 mg/kg per day, intravenously.

Pharmacologic Studies: Three studies have been published which indicate that ampicillin penetrates the blood-brain barrier in direct proportion to the degree of meningeal inflammation.^{8, 10} Thrupp *et al.*⁹ reported a CSF/serum ratio (expressed as percentage) ranging from 2.2% to 100%, with a median of 30%, during the early stages of *H. influenzae* meningitis. (Table 4) Spinal fluid levels of ampicillin ranged from 0.03 µg/ml to 7.0 µg/ml,

TABLE 4
CEREBROSPINAL FLUID CONCENTRATION OF AMPICILLIN IN ACUTE BACTERIAL MENINGITIS*,†

Organism	Days After Admission	No. of Specimens	Levels of Ampicillin			Ratio CSF/Serum Concentration			
			Mean µg/ml	Median µg/ml	Range	No. of Specimens	Mean %	Median %	Range %
<i>H. influenzae</i>	0-3	37	1.2	0.5	0.03-7.0	17	38.1	30.0	2.2-100
	4-9	16	0.4	0.3	0.06-1.0	9	36.8	14.9	1.8-100
	24 patients 10+	22	0.4	0.3	0.03-1.7	12	14.5	9.7	0-67
<i>N. meningitidis</i>	0-3	14	4.5	3.4	0.03-25				
	4-9	8	1.2	1.2	0.09-4.8				
	11 patients 10+	9	2.0	1.7	0.03-5.9				
<i>D. pneumoniae</i>	0-3	12	6.3	1.5	0.03-38	9	28.6	16.7	4-67
						10	31.7	21.5	10-80
	9 patients 4-9	6	5.6	0.4	0.2-20	6	7.6	7.6	0.20
	10+	4	0.8	0.4	0.03-2.4				

*Modified from Thrupp *et al*⁹

†Ampicillin 150 mg/kg/24 hrs. given by rapid intravenous infusion at 6 hr. intervals

with a median of 0.5 $\mu\text{g/ml}$. The CSF/serum ratio decreased with improvement in all three treatment groups.

Evaluation of Ampicillin Treatment Failures: During the past few years and up to 1974, scattered reports of failure of ampicillin therapy in the treatment of *H. influenzae* meningitis appeared. It was speculated that several factors might lead to ampicillin failure or bacteriologic relapse in *H. influenzae* meningitis including resistance of the infecting organism to ampicillin, inadequate therapy, and in the host, immunologic or anatomic defects, underlying serious disease, foreign body, or the sequestration of organisms at a site inaccessible to the drug. Six instances of ampicillin failure in *H. influenzae* meningitis reported in the literature are summarized in Table 5. The first patient developed an orbital cellulitis on the 19th day of therapy. The recurrence of infection may have been related to the sequestration of organisms at this site. The cause of recurrence is not clear in the second patient. The dosage of ampicillin employed in the third case was lowered as the patient improved and the spinal fluid culture was positive on the 10th day. It is speculated that lowering the dose as meningeal inflam-

mation decreased resulted in inadequate cerebrospinal fluid concentrations of ampicillin in this case. In the fourth patient, therapy was changed to chloramphenicol when the CSF culture remained positive after 48 hours of ampicillin therapy. It is not unusual for cerebrospinal fluid cultures to remain positive after only 48 hours of chloramphenicol or ampicillin therapy.⁷ In the fifth case, ampicillin (150 mg/kg/day) was given intravenously, with a recurrence of the symptoms on the eighth day. No factors predisposing to antibiotic failure, except possibly a low dose, could be determined in this case. A dosage of 135 mg/kg/day was employed in the treatment of the sixth patient. The low dose may have contributed to a persistent infection as evidenced by continually positive cerebrospinal fluid cultures through the 14th day. In none of these cases was the organism shown to be resistant to ampicillin.

Yow¹⁵ in 1969, reviewed the seven published case reports of bacteriologic relapse, or treatment failure. In 1971, Haltalin and Smith,¹⁸ analyzed the previously reported cases of ampicillin failure, and also added three additional cases of persistence, or relapse, of infection in *H. influenzae* type B meningitis treated with ampicillin. They concluded that most of the reported failures to date could be attributed to improper route of administration, inadequate

TABLE 5

AMPICILLIN "FAILURES" IN SIX CASES OF *H. INFLUENZAE* MENINGITIS

Case	CSF			Blood		Ampicillin			Results	Other Therapy	Source of Organism on Repeat Positive Culture; Susceptibility
	Cells	Prot	Sugar	Culture	Culture	Dose	Route	Duration			
#1 Ref. 4	800 90% N*	—	—	+	+	200mg 200mg	IV IM	3 days 11 days	Fever \times 11 days 19th day, 103; orbital cellulitis	Chloramphenicol 75mg IV \times 3 days; penicillin IV 3.0 million units	Blood; ampicillin 0.39 $\mu\text{g/ml}$
#2 Ref. 5	2400N	47	10	+	+	200mg	IV	6 days	Temp. spike on day 5, CSF cult +	Chloramphenicol 100 mg \times 10 days	CSF; susceptible to ampicillin 10 $\mu\text{g/ml}$ with disc; not tested to lower concentration
#3 Ref. 11	5200 20% N	55	13	+	+	200mg 120 mg 120mg 200mg Dose?	IV IM PO IM PO	4 days 4 days 1 day 9 days 5 days	Temp. spike on day 10, CSF cult +	None	Blood; not given
#4 Ref. 12	3000 90% N	154	0	+	+	200mg	IV	2 days	Febrile at 48 hr., CSF cult +	Chloramphenicol 100mg IV	CSF (<i>H. influenzae</i> non typable); ampicillin 0.2 $\mu\text{g/ml}$; chloramphenicol 0.5 $\mu\text{g/ml}$
#5 Ref. 13	370 30% N	71	23	+	+	200mg	IV	1 day	Afebrile by day 5; temp. spike and + CSF culture day 8	Chloramphenicol 100mg \times 7 days	CSF; susceptible to 2 $\mu\text{g/ml}$ disc.
#6 Ref. 6	1250	96	43	+	+	135mg	IV	7 days	Numerous + cultures until change of therapy on day 14; serum concentration 15.8 $\mu\text{g/ml}$ CSF 0.27 $\mu\text{g/ccml}$.	Chloramphenicol 100mg \times 1 day 50mg \times 14 day	CSF; 0.4 $\mu\text{g/ml}$

*Neutrophils

cerebrospinal fluid concentration of the antibiotic, sequestration of organisms in areas inaccessible to the drug, complicating factors such as ventriculitis, hydrocephalus and brain abscess and inadequate dosage and not to the presence of strains of *H. influenzae* resistant to ampicillin. In 1972, Mathies²³ described five isolates requiring minimum bactericidal concentration (MBC) of 100 µg/ml. However, three of the five patients responded well to ampicillin.

Occurrence of Ampicillin-Resistant Strains of H. Influenzae: This was the status of the matter until late 1973 and early 1974. The discovery of ampicillin and the recognition that *H. influenzae* was more susceptible to it than to penicillin G plus the fact that it was active against *N. meningitidis* and *D. pneumoniae* suggested that a single drug could be used in the treatment of purulent meningitis of "unknown" etiology. After confirmatory trials, the medical community rapidly adopted ampicillin as a single-drug regimen for bacterial meningitis occurring after the neonatal period.²² The use of ampicillin as a single drug effective against the usual pathogens causing meningitis beyond the neonatal period had become standard practice in this and other countries. With the exception of the five isolates reported by Mathies,²³ no instance of ampicillin resistant *H. influenzae* type B had been reported. The growth of all other reported strains had been inhibited by 1.6 µg/ml or less of ampicillin. In the February 23, 1974 issue of *Lancet*, Thomas, *et al.*²⁴ reported the isolation of an organism from two children with *H. influenzae* meningitis, which by the tube dilution susceptibility testing was resistant to ampicillin in a concentration of 400 µg/ml. In an additional case which was seen earlier, 72 hours of accepted ampicillin therapy failed to eradicate the organism from the cerebrospinal fluid, but the child responded well to chloramphenicol. Unfortunately, the susceptibility of the organism from that child to ampicillin was not studied. The three children, aged 12- to -18 months, had attended the same day care nursery during a six-week period (November 15, 1973 to January 2, 1974). The first two children died after two days of therapy. The organism from one of these children was further studied by the Center for Disease Control. The organism showed a minimum inhibitory concentration of 8 µg/ml and minimum bactericidal concentration of 32 µg/ml. Disc

sensitivity testing showed a clear zone of only six to eight ml.²⁵

Shortly thereafter, Clymo and Harper²⁶ in England identified an ampicillin-resistant strain in a child with meningitis; the MIC was 12.5 µg/ml and the MBC 50 µg/ml. Price and Boswell²⁷ in London reported a resistant strain isolated from sputum but this was not a Pittman type B strain. Both MIC and MBC were 12.5 µg/ml.

Over the next several months, ampicillin-resistant strains were reported from El Paso, Texas,²⁸ Tallahassee, Florida,²⁸ Atlanta, Georgia,²⁹ Washington, D.C.,³⁰ and Germany.³¹ Most of the patients had meningitis but ampicillin-resistant strains were recovered from patients with septicemia, cellulitis, pneumonia, epiglottitis and arthritis.

These findings prompted a re-evaluation of the treatment of *H. influenzae* infections including meningitis. The Committee on Infectious Diseases of the Americans, American Academy of Pediatrics (CID-AAP) in January, 1975 recommended that, in areas where resistant strains have been recognized, initial therapy should include the administration of penicillin G or ampicillin and chloramphenicol (100 mg/kg/day) and that, after the results of microbiologic susceptibility studies were available, therapy should be continued with the single most appropriate agent. The need for accurate susceptibility testing was also stressed.³² In February 1975, the Medical Letter³³ went even further: "Ampicillin-resistant strains are now so widespread that it would be reasonable anywhere in North America to include intravenous chloramphenicol 100 mg/kg/day for initial treatment of bacterial meningitis in children more than two months old." In the United States as of April 1975, strains of *H. influenzae* type B highly resistant in vitro to ampicillin had been reported from 20 states and the District of Columbia.³⁴ The CID-AAP³⁴ at that time noted that the prevalence of these strains is still uncertain but appears to be at a low level in most communities and that such strains may infect many children in closed communities, such as day care centers. A modification of previous recommendations was issued:

(1) Initial management of children with documented or suspected severe infection due to *H. influenzae* type B (including meningitis, epiglottitis and sepsis) should include a paren-

teral penicillin (penicillin G or ampicillin) and intravenous chloramphenicol.

(2) All strains of *H. influenzae* type B should be tested for susceptibility to ampicillin as early as possible.

(3) Ampicillin alone as initial therapy for children with severe infections that may be due to *H. influenzae* should be considered only in areas of the country where ampicillin-resistant strains of *H. influenzae* type B have not appeared and where active programs of bacterial surveillance and rapid laboratory diagnosis of susceptibility to antimicrobial agents are available.

As of June 21, 1976, ampicillin resistant strains of *H. influenzae* have been identified by the C.D.C. from 41 states, the District of Columbia and Puerto Rico. The only states to date which have not reported to the C.D.C. resistant strains are Nevada, Idaho, Montana, Wyoming, North Dakota, Iowa, West Virginia and Rhode Island. Resistant strains have also been confirmed by the C.D.C. from England, Germany, Sweden, Israel, Australia, Canada and Japan.³⁵

Up to June 21, 1976, 10 strains of *H. influenzae* type B resistant to ampicillin from patients residing in Oklahoma have been reported to the C.D.C. Five were from patients seen in Oklahoma City, two in Tulsa and the community in which the patient was seen was not specified in the remaining three. All of the isolates were from CSF or blood except for one which was obtained from lung tissue.³⁵

At the Children's Memorial Hospital, University of Oklahoma Health Sciences Center up to June 1, 1976, 11 isolates of ampicillin-resistant *H. influenzae* type B from nine patients have been identified. Three patients had meningitis, three septicemia, one pneumonia and empyema, one arthritis and in one a persistent rhinitis.

Resistance of *H. influenzae* to ampicillin is due to the production of Beta-lactamase.³⁶ The Beta-lactamase activity in five ampicillin-resistant *H. influenzae* strains was Type IIIa—ie, that with a broad substrate profile (penicillin, ampicillin and the cephalosporins), not inhibited by sulphydryl blocking reagents, and mediated in enterobacteriaceae by an R-factor called R_{TEM}³⁷. Another *H. influenzae* isolate had a Beta-lactamase with a similar substrate profile, but was less sensitive to sul-

phydryl blocking reagents.³⁶ The latter finding suggests that there might be more than one type of Beta-lactamase associated with *H. influenzae* ampicillin resistance.²² The amount of ampicillin required to inhibit the growth of "resistant" *H. influenzae* varies 1000-fold from strain to strain.²² At the time of writing, all ampicillin resistance in *H. influenzae* is associated with the production of Beta-lactamase.²² This property has allowed a means of circumventing the technical problems of ampicillin susceptibility testing by screening isolates of *H. influenzae* for Beta-lactamase activity. Rapid techniques to do this have been developed³⁸ and have proved to be quite useful.

Nor is the problem of resistance of *H. influenzae* limited to ampicillin. At a hospital in Paris, 10% of *H. influenzae* isolates are tetracycline resistant and the resistance, in one strain, was R-factor mediated.³⁹ A strain resistant to chloramphenicol, the second-line drug, has been identified.⁴⁶ Cavanagh *et al.*⁴⁰ isolated a chloramphenicol-resistant strain of *H. parainfluenzae* from the pharynx of a patient who had numerous attacks of sinusitis. More recently an untypable strain of *H. influenzae* resistant to chloramphenicol and tetracycline was isolated from the throat of a young girl.⁴¹ Kattan⁴² reports that in the strain of *H. parainfluenzae* isolated by Cavanagh and Cowonherst⁴⁰ an acetylase system exists capable of inactivating chloramphenicol and that the products of such a system are identical to those produced by an R-factor-containing strain of chloramphenicol-resistant *Escherichia coli*, as judged by thin-layer chromatography. Strains resistant to tetracycline but susceptible to ampicillin and chloramphenicol have been isolated from children with meningitis.⁴³

Incidence of Hemophilus Influenzae Meningitis: Meningitis due to *H. influenzae* has shown both relative and an absolute increase in incidence at the Children's Hospital of Pittsburgh. Admissions of patients with *H. influenzae* meningitis increased by more than 400% over a recent 25-year period: during the same time span, total hospital admissions increased by 50%.⁴⁴ At Columbus Children's Hospital, the number of children admitted with *H. influenzae* meningitis increased by 399% between the first study period (1942-1950) and the subsequent one (1960-1968).⁴⁵ A significant increase in inci-

dence has been noted at the Children's Memorial Hospital in Oklahoma City.^{46, 47} The reasons for this change in incidence are not known. It has been speculated that there has been an alteration in immunity caused by injudicious use of antibiotics for minor respiratory illnesses. However, if this were so, the age distribution of *H. influenzae* meningitis should have shifted upward to reflect such an effect on natural bacterial antibodies, and this has not been the case when this aspect has been studied.⁴⁸ At any rate, the prevalence rate of *H. influenzae* meningitis is approximately 35/100,000 per year among children less than five years of age, an incidence similar to that of endemic poliomyelitis in the pre-polio vaccine era.⁴⁹

Treatment of Serious H. Influenzae Infections: In view of the increasing incidence of *H. influenzae* meningitis, the type and efficacy of therapy becomes of paramount importance. What antibiotics should be used as initial therapy of this type of meningitis or for other types of invasive disease due to *H. influenzae* such as septicemia and arthritis? Ampicillin in a dose of 400 mg/kg/day and chloramphenicol at 100 mg/kg/day given intravenously have been suggested and constitute sound initial therapy. If the strain does not have Beta-lactamase activity or is inhibited by ampicillin at 2.5 µg/ml with use of a large inoculum (10⁹ organisms), chloramphenicol can be terminated. If the organism is resistant to ampicillin, chloramphenicol alone has proved efficacious, if not better than ampicillin in the treatment of meningitis.²² In cases of known *H. influenzae* meningitis, chloramphenicol alone is adequate unless susceptibility testing indicates that a less toxic antibiotic is equally effective. A concern may be the potential antagonism between ampicillin and chloramphenicol, a bacteriostatic antibiotic, which has been described in pneumococcal meningitis but has not been reported with *H. influenzae* meningitis and could not be demonstrated with *H. influenzae* in vitro.²²

The side effects of the two drugs must also be considered an important factor in the treatment of the patient. Ampicillin, like any penicillin, can result in allergic reactions including anaphylaxis. Gastrointestinal side effects include nausea, vomiting, and diarrhea. Eosinophilia greater than 10% is fairly common. Chloramphenicol is well known for its hematologic toxicity, the most common being

depression of the reticulocytes. Thrombocytopenia and leukopenia also occur with significant frequency. These can be associated with either short or long-term therapy. Mathies *et al.*⁸ found that 8.8% of patients on chloramphenicol therapy had hematologic untoward reactions, compared to 3.6% with ampicillin. Side effects were defined as a reticulocyte count less than 0.1%, marked reduction of platelets on smear, or a leukocyte count of 4000/cmm or less with fewer than 15% neutrophilic cells. Other side effects of chloramphenicol include allergic reactions, optic and peripheral neuritis, glossitis and diarrhea.

Feldman *et al.*⁵⁰ recently reported the case of a child with *H. influenzae* meningitis who relapsed after combined therapy including chloramphenicol. The strain recovered from the spinal fluid prior to initiation of therapy was said to be susceptible (by disc method) to penicillin G, chloramphenicol and ampicillin. Immediately after the initial lumbar puncture, the child was given one dose of ampicillin (200 µg/kg) intravenously. Antibiotic therapy was continued with penicillin G for three days and chloramphenicol for 11 days. The child was discharged on the sixteenth hospital day, the CSF having been sterile on the second and fourteenth hospital days. Immediately after discharge she had a recurrence of fever and CSF again yielded *H. influenzae* type B. MIC for penicillin, ampicillin and chloramphenicol for this isolate was 1.0/µg, 0.5/µg, and 10/µg/ml respectively. She again responded well to penicillin G and chloramphenicol and had no further recurrences. Her relapse was postulated to be due to localized cerebral vasculitis which was not treated for a sufficient period of time during the initial course of therapy.

Antibiotics of the penicillin-cephalosporin group on a theoretical basis could be efficacious in the treatment of infections due to ampicillin-resistant *H. influenzae*. Such agents should be resistant to hydrolysis by all *H. influenzae* Beta-lactamase, inhibit growth at concentrations of 2 µg/ml or less and have pharmacokinetic properties producing appropriate concentrations in the infectious focus. Carbenicillin, which is degraded by Type IIIa Beta-lactamase at 5- to 15% the rate of ampicillin, may have this property.²²

Smith²² has pointed out that another approach is to use a Beta-lactamase inhibitor allowing ampicillin to reach the active site in the

bacteria, intact. Cloxacillin can competitively inhibit Type IIIa Beta-lactamase activity and in vitro makes ampicillin "resistant" strains of *Pseudomonas aeruginosa* susceptible to low concentrations of ampicillin. This approach has not found wide clinical use because of the necessity of the inhibitor and the active drug to have identical pharmacokinetic properties. A noncompetitive (irreversible) inhibitor is theoretically better, but such agents with low toxicity are not available.

Other antimicrobials which have been used with success in the treatment of *H. influenzae* meningitis include intrathecal streptomycin, intravenous tetracycline and oral trimethoprim combined with sulfamethoxazole. Intrathecal aminoglycosides are rarely used because of the necessity and difficulty of repeated lumbar punctures. Tetracycline has been reported to have a mortality and morbidity rate equivalent to that of chloramphenicol, but, as previously mentioned, *H. influenzae* isolates resistant to tetracycline have now been identified.^{39, 43} In addition, the mottling of teeth from tetracycline and its deposition in bones has discouraged its use in *H. influenzae* meningitis, which is almost exclusively a disease of infants and children. The limited experience with trimethoprim and sulfamethoxazole along with concern about the adequacy of oral administration in a critically ill child makes this approach skeptical.²²

The characteristics and potentials for the newer penicillins and cephalosporins have been outlined.⁵¹

Immunization: Another approach to the problem of invasive *H. influenzae* infections lies in immunization. An experimental vaccine prepared from purified polyribophosphate (PRP) from the capsule of *H. influenzae* type B has been studied.⁵² After the vaccine was shown to be non-toxic and immunogenic in adults, tests in infants and young children were carried out. Immunizations were well tolerated and a single injection triggered a significant antibody response in up to 95% of individuals older than two years. Preliminary results have been both promising and discouraging. It appears that the vaccine is effective in children over two years of age but it is not effective in younger children. The problem, of course, is that about 70% of all cases of *H. influenzae* meningitis occur in children younger

than two years of age. One of the several possible alternative approaches is to make the bacterial antigen more complex by combining polysaccharide and protein. Studies have been initiated with such a preparation. Results are encouraging and the work is continuing.⁵³ An alternative approach derives from the observation that certain *Escherichia coli* strains possess antigens cross-reactive with PRP.⁵⁴ Conceivably, feeding one of these apparently innocuous strains could induce immunity against *Hemophilus influenzae* disease.

Summary

Since its discovery in 1961, ampicillin has proved to be a valuable drug in the treatment of *H. influenzae* infections. This paper reviews its microbiologic and pharmacologic characteristics, analyzes reported failures in the treatment of influenzal meningitis, discusses the emergence of strains of *H. influenzae* resistant to ampicillin, and speculates on the present and future management of serious *H. influenzae* infections.

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Detection and Treatment of Communication Disorders Characterized by Hypernasal Speech in the Absence of a Cleft Palate

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Hypernasal speech can be a potentially serious type of communication disorder which is often undiagnosed in children until after the performance of a routine adenoidectomy. Medical, prosthetic, and surgical methods of treatment are outlined.

SUMMARY

This paper deals with a potentially serious type of speech disorder which is often undiagnosed in children until after the performance of a routine tonsil-adenoidectomy. Methods of early detection and specific diagnostic tests will be discussed. Patient management; including medical, prosthetic, and surgical methods of treatment will be covered.

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What is a speech disorder? There is no absolute standard of normal speech. However, a speech disorder is considered to be present when most listeners pay as much or more attention to *how* a person speaks than to *what* he is saying. Speech is a very complex mechanism that is influenced by anatomical factors, learning ability, hearing, and motor coordination.

Before abnormal speech can be corrected, one must know which components of speech are abnormal. The individual best equipped to make this diagnosis is the speech pathologist; a specialist working in the field of communication disorders, often overlooked by the physician.

Two components of speech concerning the physician are *articulation* and *resonance balance*. By articulation, we mean the ability to pronounce words clearly. By resonance balance, we refer to voice quality. This depends on the ability to get the proper amount of sound through the mouth with no or a minimally controlled amount of sound going through the nose in order to produce normal resonance.

In a normal individual, the middle third of the soft palate closes against the posterior wall of the pharynx and directs most of the sound coming from the larynx through the mouth. This sound is then formed by the lips and tongue and we usually hear the coordi-

nated effort as intelligent speech. If this soft palate-pharyngeal mechanism, known as velopharyngeal closure, does not function properly then abnormal resonance balance results and voice quality sounds abnormal. When too much sound leaks through a patient's nose, we have the abnormality known as "nasal speech."

For example (nasal speech sample), "I am now allowing most of the air to leak through my nose but my articulation is good. This is an example of nasal speech" — a disturbance in resonance balance.

If through some surgical procedure or anatomical defect, no air is permitted to go out the nose, then speech becomes "denasal." However, if the blockage is at the level of the soft palate, denasal speech may be hardly noticed. If nasal blockage is complete, an individual will not be able to "hum." Squeeze your nose and try to hum with your mouth closed, and you will see what I mean.

If a child never had the anatomical mechanism to permit sound to go through his mouth, the lips and tongue will not learn to pronounce words correctly. Thus, even though resonance balance may be corrected at a later time, speech will seem unintelligible unless the patient can be retrained to articulate properly. With abnormal resonance balance in which sound is directed from the nose, speech training to improve articulation is usually not too successful. It's like trying to row a boat across a dry meadow.

Abnormal resonance balance, with good articulation, commonly produces intelligible speech. An example of this is seen in the elderly patient who has had a partial resection of the palate for a tumor and whose speech, though nasal, is quite intelligible because of satisfactory articulation.

Speech, along with articulation skills, begins to develop in the child somewhere between fifteen months and two years of age. If adequate velopharyngeal closure is not present at this time, the child tends to develop abnormal compensatory mechanisms which produce abnormal speech. Retraining at a later age becomes increasingly difficult but can be accomplished, provided that an adequate velopharyngeal mechanism is obtained surgically or by the use of an obturating mechanism such as a dental appliance.

When a parent notes that a child has an abnormal speech pattern, the first person

that is commonly consulted is usually the family physician or pediatrician. In many instances, the parent is often told that the child will grow out of the situation. This is poor advice as the majority of children do not improve. Valuable time is usually lost in delaying treatment, since the longer a speech defect persists, the more difficult it is to correct.

During the last few years, I have been asked to see an increasing number of irate parents, who claim that their child had normal speech until a tonsilectomy had been performed, and now suspect that the surgeon did something wrong! The problem is usually not related to the tonsilectomy, but to the performance of the accompanying adenoidectomy.

Usually, the child had minimal hypernasal speech pre-operatively due to the presence of minimal velopharyngeal insufficiency in the absence of any overt anatomical deformity such as a cleft palate. This slightly hypernasal speech was commonly interpreted by the physician as being denasal speech, due to blockage from swollen tonsils and adenoids. Following the performance of the adenoidectomy, the velopharyngeal space was widened and hypernasal speech was markedly accentuated postoperatively.

In general, a routine adenoidectomy should *not* be performed on any child that has a history of abnormal speech, until a thorough evaluation of the speech mechanism has been made. I would suggest that a consultation with a speech pathologist be obtained pre-operatively in these cases. If the speech pathologist feels that the problem is related to velopharyngeal insufficiency, then additional evaluation should be obtained from a plastic surgeon experienced in the field of speech disorders. Cases of suspected hypernasal speech, in the absence of an overt cleft of the palate, can be evaluated at the University of Oklahoma Speech and Hearing Center.

Clinical speech evaluation in children, usually performed at around four to six years of age, though earlier in some instances, would involve the following studies:

Speech evaluation. This is usually performed by a speech pathologist in order to determine and classify the type of speech defect. Clinical evaluation is made to see whether resonance balance falls within normal limits and articulation errors are classified.

Examination of the soft palate, pharynx, and nose. Anatomical defects of these structures can give rise to speech defects. Though an overt cleft palate is very easily seen, the diagnosis of a submucous cleft is more difficult.

Radiographic studies. Video-tape recordings with synchronized sound in order to study the dynamic functioning of the soft palate are extremely useful, and in most areas have replaced the previously used 16mm and 35mm cine x-ray studies.

Evaluation of intelligence and learning abilities.

Evaluation of environmental factors. If a child is placed in an environment where he never hears normal speech, he will not learn normal speech.

Neurological studies. Some children have normal anatomical structures, but isolated paralysis or functional abnormalities of the palatal and pharyngeal muscles. Also, any defect in the ability to coordinate complex movements due to central nervous system disease must be fully evaluated.

Hearing defects. Severe hearing loss will affect speech.

Age factors. The longer a speech defect has been permitted to persist, the more difficult it is to retrain an individual. Also, certain types of speech patterns in very young children are part of normal development.

Nasal air flow studies. By the use of both simple and highly sophisticated devices, it is often possible to measure the amount of air coming out of the mouth and nose simultaneously, and thus objectively confirm clinical findings.

After a diagnosis of abnormal palatal functioning has been made by the preceding

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methods, the velopharyngeal insufficiency problem can usually be corrected by speech therapy, the use of dental appliances, surgery or a combination of all of these methods.

In cases where x-ray evidence and clinical evaluation have demonstrated normal movements of the soft palate and posterior pharyngeal wall, and the opening between the soft palate and posterior wall is felt to be extremely small, speech therapy alone can often provide some improvement. However, the anatomical defect is still there and the child is only learning to compensate for this defect by "trying harder." Unfortunately, this compensation normally fails when the child forgets himself and begins talking spontaneously, or attempts to increase auditory volume. Many of these children, in order to maintain their compensatory mechanism, often speak in low tones and never place themselves in a social situation in which they are required to speak out. In my opinion, speech therapy alone, as a means of attempting to correct velopharyngeal insufficiency, is very unsatisfactory in all but a few cases.

The anatomical defect between the soft palate and the posterior pharyngeal wall can be obturated, or closed, by means of a dental appliance. One of the most commonly used obturating appliances is a speech bulb. In some instances, an appliance used to elevate the soft palate may be helpful. In general, these appliances are cumbersome and are often discarded by the child, when the opportunity presents itself. Also, there is need for constant dental care. The basic philosophy that we have used is that it is always better to correct the defect by the use of the patient's own tissues, which become a part of him, than to utilize a prosthesis. Again, in my opinion, I would reserve the use of dental appliances primarily for those cases in which surgery cannot be performed for other medical reasons, or in the unusual situations in which a surgical procedure has failed and secondary surgery cannot be performed. Occasionally, a surgical procedure will be refused and a dental appliance will be fitted; only to have the patient return and request surgery.

At the present time, surgical correction of velopharyngeal insufficiency is the most widely accepted method of treatment. Surgical procedures are most successful in those cases where normal mobility of the soft pa-

late and posterior pharyngeal wall is present. The surgical procedures in these cases normally allow the patient to restore normal resonance balance and to control to some extent, the amount of nasal air leakage, as occurs with a normal velopharyngeal mechanism.

Surgery is least successful in those cases in which both the soft palate and posterior pharyngeal wall show no mobility. In these cases, the aim of any surgical procedure is to make the child slightly denasal. This denasality is very acceptable in the English language, since there are very few sounds that require some nasal air escape.

Of course, the ultimate overall results of any surgical procedure will still be influenced by the child's hearing ability, learning ability, and motor coordination. For these reasons, surgical correction of velopharyngeal insufficiency in the deaf, severely mentally retarded, and those with severe cerebral palsy should probably not be performed, except in the very few cases where extensive clinical pre-operative evaluation has indicated that some improvement can be anticipated.

In general, the surgical procedures that are utilized to correct velopharyngeal insufficiency involve the use of palate lengthening procedures, large and small superiorly and inferiorly based posterior pharyngeal flaps, and attempts at building up the posterior pharyngeal wall. These surgical procedures must be individualized for each patient; and often more than one surgical procedure is

combined at a single operation in order to obtain maximum functional results.

Post-operatively, following a successful surgical anatomical repair, the patient will commonly require speech therapy in order to correct the persistent articulation errors which have developed pre-operatively.

The procedure that I utilize in my practice is to follow these patients for a period of at least two years post-operatively. I prefer that speech therapy be performed by a person other than the speech pathologist who is evaluating the patient. In this way, there is a constant system of checks and balances and coordination of efforts between the surgeon, speech pathologist, and speech therapist. This helps to eliminate unnecessary therapy and produce maximal results without over utilization of treatment facilities.

Although the diagnosis and correction of defective speech is often a complex problem requiring the combined coordinated services of many specialists, great strides in treatment have been made in the last fifteen years. The inability to communicate with others is one of the severest handicaps that anyone can face in daily life. For this reason when a speech defect is noted in a child, diagnostic studies should be instituted promptly. Often, we as physicians do great harm when we tell a parent, "Let's not be concerned about that communication problem, the child will probably grow out of it!" □

2620 N.W. Expressway, Oklahoma City, Oklahoma
73112



News From The Oklahoma State Department of Health

Air Pollution in Oklahoma Caused by February 23-24, 1977, Dust Storm

On February 23 and 24, 1977, Oklahoma experienced a severe dust storm. High winds, blowing over the drought stricken areas of Western Oklahoma and Texas generated a dust cloud that at times topped at more than 13,000 feet. Visibilities were reduced to a quarter of a mile or less in certain areas of the State. The cloud moved slowly eastward across Oklahoma and days later its effects were seen as far away as the Atlantic seaboard.

The suspended particulate matter produced by the storm is a typical example of naturally caused and relatively uncontrollable air pollution. The national and state primary ambient

air standard for suspended particulate matter is 260 micrograms per cubic (ug/m³) meter averaged over a 24-hour period not to be exceeded more than once per year. This standard was promulgated, allowing for an adequate margin of safety to protect the public health from any known or anticipated adverse effects of suspended particulate matter.

During the storm, the Air Quality Service of the Oklahoma State Department of Health, monitored levels of suspended particulates at various sampling stations located throughout the State.

Although the dust storm caused the air quality standard to be exceeded, the Air Quality Service determined that the vast majority of the particles generated by the storm were larger than 3.4 microns in diameter. Particles larger than 2 microns in diameter are generally filtered out by the hair and mucous membranes of the nose and throat and are not deposited into the lungs. Asthmatics and persons with chronic lung disorder suffered some respiratory distress during the storm.

The map below indicates isopleths of the 24-hour particulate levels experienced in Oklahoma on February 24, 1977. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR MARCH, 1977

DISEASE	March 1977	March 1976	February 1977	TOTAL TO DATE 1977	TOTAL TO DATE 1976
Amebiasis	4	—	—	4	2
Brucellosis	—	—	—	—	—
Chickenpox	169	329	192	514	895
Encephalitis, Infectious	3	3	—	4	4
Gonorrhea (Use Form ODH-228)	1146	1138	920	3322	3069
Hepatitis, A, B, Unspecified	66	106	75	193	536
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	1	4	—	2	15
Meningitis, Aseptic	6	2	1	10	5
Mumps	74	193	106	273	384
Rabies in Animals	47	12	19	85	24
Rheumatic Fever	—	2	—	1	3
Rocky Mountain Spotted Fever	—	1	—	1	1
Rubella	9	7	4	17	31
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	16	14	16	39	196
Salmonellosis	1	14	2	10	36
Shigellosis	1	42	3	7	66
Syphilis, Infectious (Use Form ODH-228)	7	11	5	35	21
Tetanus	—	—	—	—	—
Tuberculosis, New Active	32	34	29	77	84
Tularemia	—	—	—	—	—
Typhoid Fever	—	—	—	—	—
Whooping Cough	1	—	—	2	1

HEW List Draws More Criticism

Pointing to the Freedom of Information Act and the Sunshine laws, the Department of Health, Education and Welfare and the Social Security Administration have recently released the names of physicians, groups and laboratories which did more than \$100,000 in Medicare business during the past year. It marked the first breach in the Medicare program's long-standing policy against disclosing such information. It also brought sensational headlines in the press, angry rebuttals from physicians and the disclosure that HEW and the SSA had released information fraught with errors and oversights.

The over \$100,000 category included 409 physicians, 1,752 medical groups and 58 laboratories. This compared to 2,533 physicians, dentists and pharmacies listed in the latest Medicaid report of more than \$100,000 intake last November.

The American Medical Association branded the releasing of the names as "only serving to badger a large segment of the profession and to establish guilt by innuendo." AMA Executive Vice-President James Sammons, MD, said, "There is a basic dishonesty in the broadcast release of the names of individuals receiving Medicare payments." Doctor Sammons added that if "HEW thinks any physician on this list is guilty of fraud, HEW should say so. We will assist in any case where there is good reason to suspect wrong doing."

Doctor Sammons said the physicians are identified by HEW as individual recipients of Medicare funds, whereas the payments are often for services provided by many others as well. Many of the physicians listed are hospital-based radiologists, pathologists, anesthesiologists. He said, "We would also point out that these services are paid for at a rate set by Medicare and based on prevailing charges two years out of date."

Predictably, press reaction was uneven. Some press took the trouble to check before using the story. Some press did not. All too typical were headlines like this one, from the *Fort Lauderdale Sun-Sentinel*:

"HEW RELEASES NAMES OF DOCTORS ON MEDICARE GRAVY TRAIN."

Few stories bothered to explain that the figures cited are gross, not net; or that HEW's dollar totals included not only payments to the physician but payments made directly to the

beneficiary where the beneficiary is responsible for paying the physician's bill.

Having gone through a similar experience in November of 1976, when the Social and Rehabilitation Service made public a list of physicians, dentists, pharmacies and laboratories that had received \$100,000 or more from Medicaid in 1975, the AMA immediately began checking for accuracy as many as possible of the names and amounts listed as paid to solo practitioners.

By press time, some 166 physicians listed in solo practice were contacted in 30 states and the District of Columbia. Of this group:

**82 were incorrectly listed as solo practitioners;

**5 had incorrect amounts attributed paid to them;

**22 reported both the solo designation and the amount were incorrect.

Some 65.7 per cent of the information released on the 409 physicians listed as solo practitioners was therefore incorrect.

Complaints from individual physicians victimized by these inaccuracies poured into the press. A roundup by the *Associated Press* pointed out some of the injustices done by the HEW release in which two out of three solo practitioners were inaccurately listed.

The *Washington Star* took editorial note of HEW's inaccuracies under the heading: "A SLOPPY PIECE OF WORK." Syndicated columnist, James Kilpatrick, also was critical of HEW and predicted, "They'll do it again."

The physicians contacted by the AMA and state medical societies reported harassment by angry patients, crank telephone calls, children taunted at school as the children of a crook, anonymous threats, attacks by colleagues, and continuing embarrassment within their communities.

A number of Congressmen have inserted remarks into the Congressional Record with respect to HEW's disgraceful performance.

HEW Secretary Joseph A. Califano has privately admitted dismay and has publicly stated that a corrected list will be forthcoming shortly.

In Oklahoma several papers have carried front-page stories pointing out the inaccuracies of the HEW list. Additionally, a resolution demanding a formal apology from both HEW and the Social Security Administration, was submitted for House of Delegates consideration by the Council on Planning and Development. This resolution calls for the AMA to admonish HEW and the SSA and to investigate all possible ways of preventing the further release of erroneous information. □

Arkansas Passes Legislation On Discipline

A statute approved this year in Arkansas requires that any hospital taking disciplinary action against a physician report such action within 60 days to the state medical board. The legislation, which was patterned after an AMA model bill, provides that the hospital will report "the name of any member of the medical staff or any other physician practicing in the hospital whose hospital privileges have been revoked, limited or terminated for any reason,

including resignation, together with pertinent information relating to such action, and shall also report any other formal disciplinary action concerning any such physician taken by the hospital upon recommendation of the medical staff relating to professional ethics, medical incompetence, moral turpitude or drug or alcohol abuse."

All reports filed with the board are strictly confidential except that they may be disclosed in a disciplinary hearing before the medical board or in any subsequent trial or appeal.

The Arkansas statute also provides immunity for any hospital or hospital employee who reports a physician's conduct under this act. □

Burn Unit Announces Opening

Oklahoma Children's Hospital has announced the opening of a 12-bed pediatric burn unit and a special telephone number for physicians. The burn unit is designed for patients 21 years of age or less, and the special telephone number, (405) 271-4733, is designed to facilitate prompt admissions of patients. □



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About the Cover

Pictured on the cover of this month's *Journal* is C. S. Lewis, Jr., MD, the new President of the Oklahoma State Medical Association. Doctor Lewis was inaugurated on Friday, May 6th, during Oklahoma Medical Summit '77. He will serve until next year's annual meeting, which will again be held in May.

Doctor Lewis is a native of Oklahoma and was born in Muskogee. He received a Bachelor of Arts degree from the University of Washington at St. Louis and graduated from the Washington University School of Medicine. He specializes in internal medicine and cardiology and is a Diplomat of the American Board of Internal Medicine. He is also a member of the Board of Directors of the American Board of Internal Medicine, and he is the governor for Oklahoma of the American College of Physicians. He has served as Chairman of the Southern Regional Heart Committee of the American Heart Association and as Vice-President of the AHA in 1973-1974. Doctor Lewis has also been a member of the Board of Directors of the AHA and this year received a distinguished service award from that organization.

Doctor Lewis has also been active in his county and state medical societies, having served as President of the Tulsa County Medical Society in 1971 and as Secretary of the Oklahoma Foundation for Peer Review.

He presently is medical director at St. John's Medical Center in Tulsa. □

Fraud/Abuse Legislation Eyed

A bill aimed at rooting out fraud and abuse in federal health programs has started down the legislative path in Congress. The American Medical Association applauded the objective, but said the bill is so broadly drawn that it allows investigation of "the actions of almost every practicing physician in the United States."

The minority of physicians who abuse Medicare and Medicaid should be brought to justice, the AMA said, but "justice is not served if all practitioners are subjected to harassment and restraint so that a few malefactors may be apprehended."

Edgar T. Beddingfield, MD, Chairman of the AMA's Council on Legislation, testified before an unusual joint hearing by the health sub-

committees of the House Ways and Means and House Commerce Committees. Ways and Means is responsible for Medicare; Commerce, for Medicaid.

To the extent that the legislation was aimed at the "Medicaid mill" it has "far exceeded the mark," said Doctor Beddingfield. "Since this bill has been characterized as the 'Medicaid mill' Fraud and Abuse Bill, practically all group practices could be stigmatized because of the broad application of its provisions."

The broad approach of the bill is "aimed at a large proportion of all practicing physicians, casting its stigma of impropriety upon the tens of thousands of physicians who fall within its purview," the AMA witness said. "Virtually all group practices in the United States would be subjected to the same requirements as the so-called 'Medicaid mill.'"

All groups of two or more practitioners would be subject to the extensive disclosure of records provisions, Doctor Beddingfield noted, adding that all practicing physicians who render Medicare and Medicaid services would be subject to review by Professional Standards Review Organizations (PSRO).

Continuing his criticism of the legislation, Doctor Beddingfield said it "endangers the confidentiality of patient records, and certain provisions cannot be justified as needed or even as a wise tool to combat fraud." □

Oklahoma City Writer Receives Journalism Award

Ervin Watson, the medical writer for the *Oklahoma City Times*, has been named as the first recipient of the Oklahoma State Medical Association award for medical journalism.

Watson, who attended both Oklahoma City University and Phillips University in Enid, has been a reporter with the Times since 1948. He began writing medical stories in 1965 and now writes a weekly column in the Saturday edition called "Medical Notes." Watson received an OSMA plaque commemorating his selection at the opening session of the OSMA's House of Delegates this month. He was also honored at an OSMA banquet which was held that same evening.

A \$250 Ervin Watson-OSMA Medical Journalism scholarship was awarded to the journalism school of Watson's choice . . . Oklahoma State University. □

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Former OSMA President Criticizes AMA Action

Former President of the Oklahoma State Medical Association, Doctor Orange M. Welborn, Ada, has criticized the American Medical Association for testifying its support of HR 2222 and has called upon the AMA to retract the statement or "advise us why our national organization supports concepts that are contrary to the attitude of the majority of its members." The letter, which was sent to James H. Sammons, MD, Executive Vice-President of the AMA, was in response to AMA testimony favoring a collective bargaining bill pending in the US House of Representatives. This bill would define housestaff as "hospital employees" and would therefore entitle them to collective bargaining procedures, etc.

Fifth District Congressman Mickey Edwards first brought the AMA's testimony to Doctor Welborn's attention in a letter he sent to his physician constituency. Representative Edwards said the effect of the legislation would be to "extend collective bargaining and labor unions to hospital residents and interns."

In his letter he sent to his approximately 1,000 physician constituents, Edwards said the AMA testimony had caused the more conservative members of Congress to be "shaken in their original determination to oppose the bill." Representative Edwards also expressed fear that passage of HR 2222 would result in hospital strikes, increased hospital cost, and a deterioration in the quality of education.

Edwards concludes his letter by asking, "Was I right, or is the AMA right?"

In a subsequent conversation with Doctor Kenneth W. Whittington, President, Oklahoma County Medical Society, the Chairman of the AMA Board of Trustees, Raymond T. Holden, MD, said that the AMA position was founded in a report approved by the AMA House of Delegates in 1975. "The central issue," explained Doctor Holden, "is whether housestaff are students or employees. As students they are not eligible for protection under NLRA regulations, as employees they are."

The 1975 AMA report which was approved by the House of Delegates reads in part: "The conclusion seems inescapable that interns and residents are at the same time both students and employees. The two categories are not mutually exclusive. The fact that they are in a learning process of acquiring new skills does not detract from their legal right to organize

and engage in collective bargaining under the National Labor Relations Act. Nevertheless, it must be recognized that unless collective bargaining and negotiations are conducted judiciously and contained within proper limits by respective parties, the result will be interference with the quality of graduate medical education."

Upon learning of Oklahoma's opposition to HR 2222 and its concern over the AMA testimony, AMA Executive Vice-President Doctor Sammons explained, "In carrying out the policy of the House of Delegates at the AMA, testimony on HR 2222 stresses the dual character of interns and residents as employees and students. It was pointed out that as employees, the interns and residents should be entitled to the rights of other employees under the National Labor Relations Act. Moreover, in providing this protection, the interns and residents would be assured of a larger measure of due process. It should be kept in mind specifically that the act does not require the formation of any body to conduct collective bargaining but merely would insure the opportunity to interns and residents in the event that the circumstances at the place of employment required such action."

Doctor Welborn said regardless of the report, "The protection of one's rights does not give license to the AMA representatives to go to Capitol Hill and advocate collective bargaining and unionism. We would come to the aid of housestaff if we were convinced that students were being discriminated against or that institutional conditions prevented quality medical care. We would be opposed, we are sure, to efforts to unionize our hospital-based physicians' training programs."

The future of HR 2222 was still undecided at press time. □

Endoscopic Society to Meet

The Arkansas-Oklahoma Endoscopic Society will convene for their annual meeting on June 10th, 11th, and 12th, 1977, at the Camelot Inn in Little Rock, Arkansas.

Doctor Clint Texter, who is head of Continuing Medical Education for the society, has planned an informative medical education program for the meeting.

Additional information may be obtained from Beverley J. Foster, RN, Clinic Manager, Gastroenterology Associates, 409 University, Little Rock, Arkansas 72205. □

Pulmonary Conference Scheduled For Western Hills Lodge

The annual Pulmonary Conference of the Oklahoma-Kansas Thoracic Societies will be held at Western Hills Lodge, Wagoner, Oklahoma, from June 3rd-5th, 1977.

Special guest faculty will be Robert G. Fraser, MD, University of Alabama; James C. Hogg, MD, PhD, McGill University, Montreal, Quebec, Canada; and J. A. Peter Pare, MD, McGill University, Montreal, Quebec, Canada. Additional faculty participants will be from the University of Oklahoma Health Sciences Center, University of Kansas Medical Center, University of Arkansas School of Medicine and Washington University School of Medicine, St. Louis, Missouri.

Further information may be obtained from the Oklahoma Thoracic Society, P.O. Box 53303, Oklahoma City, Oklahoma 73105 or call 524-8471. □

DEATHS

FORREST M. LINGENFELTER, MD 1897-1977

A lifetime resident of Oklahoma City, Forrest M. Lingenfelter, MD, 80, physician and surgeon, died April 4th, 1977. A 1923 graduate of the University of Oklahoma College of Medicine, Doctor Lingenfelter later became Chairman of the Department of Surgery and Head of the Residency Program and then was named Professor Emeritus of Surgery at the same school.

Doctor Lingenfelter was very active in medical circles and was a member of the International College of Surgeons, the Southwest Surgical Society, the American College of Surgeons, the American Goiter Association and the Oklahoma City Clinical Society. He held associate memberships in the Southwest Section of the Society for Experimental Biology and Medicine and the Southwest Section of the American Association for Cancer Research.

H. W. WENDELKEN, MD 1914-1977

A Miami, Oklahoma, internist, H. W. Wendelken, MD, died April 13th, 1977. Born in Portsmouth, Ohio, Doctor Wendelken was graduated from the University of Michigan Medical School in 1940. From 1943-1946, he served with the US Navy during World War II. Doctor Wendelken practiced in Seattle, Washington, before moving to Miami in 1946. For many years, he had served as Chairman of the Ottawa County Red Cross and Heart Association.

REBECCA H. MASON, MD 1894-1977

Rebecca H. Mason, MD, 82, Chickasha general practitioner, died March 27th, 1977. Born in Minneapolis, Minnesota, Doctor Mason was graduated from Rush Medical College in Chicago in 1925. She was a professor and served as physician at Oklahoma College of Women (presently USAO) for over 40 years. In 1961, the Oklahoma State Medical Association presented Doctor Mason with an Honorary-Life Membership of outstanding service to the medical profession.

MARVIN L. SADDORIS, MD 1902-1977

A Cleveland physician since 1934, Marvin L. Saddoris, MD, 74, died in Stillwater, Oklahoma, in March. Born in Herington, Kansas, Doctor Saddoris was graduated from the University of Oklahoma College of Medicine in 1927. Following postgraduate training in Missouri and Illinois, Doctor Saddoris established his general practice in Cleveland where he remained until his death. □

State Physicians Volunteer for First-Aid Duty

For the 13th consecutive year, Oklahoma physicians have volunteered their time in order to staff a first-aid station at the Oklahoma capitol. The OSMA pioneered this project in 1965, and since that time many state medical associations throughout the country have adopted it as part of their yearly program. In Oklahoma the first-aid station is now jointly sponsored by the OSMA, the Oklahoma State Nurses Association, the Oklahoma Osteopathic Association and the Oklahoma City Area Hospital Council.

The OSMA has been responsible again this year for providing physician manpower during the months of January, March, April, May and June if necessary. The nurses' association has provided a nurse each day, and the Oklahoma City Area Hospital Council has taken care of the equipment and medication needs. So far the reorganized system appears to be functioning well, and the state capitol first-aid station continues to fulfill an important role.

Listed below are physicians who have taken part in this project during the past few months and those who plan to serve in May and June.

DOCTORS OF THE DAY

JANUARY

Orange M. Welborn, MD, Ada
Norman Haug, MD, Oklahoma City
Ronald Legako, MD, Edmond
Noble Ballard, MD, Altus
Wilbur Lewis, MD, Midwest City
Thomas L. Ashcraft, MD, Tulsa
Tim Silver, MD, Oklahoma City
N. A. Cotner, MD, Grove
Leonard R. Diehl, MD, Oklahoma City
Tom Garrett, MD, Oklahoma City
John Huser, MD, Weatherford
James W. Hendrick, MD, Oklahoma City
Lloyd G. Williams, MD, Wetumka
W. F. Phelps, MD, Tulsa
D. M. Gregory, MD, Oklahoma City

MARCH

Armond Start, MD, Oklahoma City
Joe Hake, MD, Stillwater
Keith Falsarella, MD, Oklahoma City
Robert C. Tout, MD, Stillwater

B. J. Matter, MD, Edmond
Robert Spector, MD, Norman
Malcolm Mollison, MD, Altus
Carl H. Guild, MD, Bartlesville
Mark Holcomb, MD, Enid
Manuel J. A. Hinds, MD, Tulsa
John G. Matt, MD, Barnsdall
William S. Harrison, MD, Chickasha
Gerardo Bustillo, MD, Norman
James Rhymer, MD, Clinton
Charles Paramore, MD, Shawnee
Tim Baldwin, MD, Stillwater
Jack L. Berry, MD, Okarche
Don Cooper, MD, Stillwater
James R. Taylor, MD, Bartlesville

APRIL

George Gaithers, MD, Stillwater
William G. Bernhardt, MD, Midwest City
Roger L. Kinney, MD, Sapulpa
Donald Graves, MD, Wakita
James Carley, MD, Stillwater
Thomas L. Whitsett, MD, Oklahoma City
Howard Hagglund, MD, Norman
George H. Hulsey, MD, Norman
Arthur Hoge, MD, Oklahoma City
John A. Blaschke, MD, Oklahoma City
Neil Woodward, MD, Oklahoma City
Bartis M. Kent, MD, Muskogee
Keith Falsarella, MD, Oklahoma City
F. K. Buster, MD, Cheyenne
R. L. Cornelison, MD, Oklahoma City
Orval L. Parsons, MD, Lawton

MAY

Michael Grossman, MD, Oklahoma City
E. H. Lindley, MD, Duncan
Paul Kernek, MD, Holdenville
Jose A. Rosell, MD, Norman
Gary K. Borrell, MD, Yukon
Johnny B. Roy, MD, Oklahoma City
Richard Gross, MD, Edmond
Layton R. Sutton, MD, Ardmore
F. H. Austin, MD, Lawton
Robert Dille, MD, Norman
Joseph W. Stafford, MD, Enid
Tom Garrett, MD, Oklahoma City
Linda Mae Johnson, MD, Chickasha

JUNE

R. E. Rhodes, Jr., MD, Tulsa
C. J. Shaw, MD, Oklahoma City
H. M. Chandler, MD, Oklahoma City
Henry D. Wolfe, MD, Hugo



Book Reviews

PEDIATRIC INFECTIOUS DISEASES: A PROBLEM-ORIENTED APPROACH

Hugh L. Moffett. 504 pp., 80 illustrations, 59 tables. Philadelphia. J. B. Lippincott, 1975. \$29.00

According to the author, the objective of this book is to help the physician to classify every patient's illness, recognize life-threatening emergencies, proceed logically, to confirm or exclude likely etiologies of a syndrome, evaluate the differential diagnosis, analyze situational problems, consult references and recognize new syndromes. To meet these objectives, the problem-oriented approach is utilized. The book contains 21 chapters and they vary considerably in the utilization of the problem-oriented approach and in the achievement of the author's goals. This undertaking is based primarily on the author's personal experience.

The first chapter "General Concepts" is useful. The author discusses prevalent misconceptions about the decreasing incidence of infectious disease, special problems of children, the clinical approach to infectious diseases, analysis of laboratory data and the management of infections. The chapter dealing with nose and throat syndromes is helpful in categorizing disorders involving these sites.

Perhaps the most useful part of the book is the section on "fever syndromes." In this chapter, the author has employed the problem-oriented approach and divides fevers into several categories. These categories offer the physician a logical and reasonable approach to the evaluation of the febrile patient. The chapter on "rash syndromes" is less helpful chiefly because of oversimplification in places and illustrations of only fair quality.

Other strong points of the book include an extensive, up-to-date bibliography (but with certain important omissions) which is referenced by topic, an excellent presentation of selected aspects of physical diagnosis and the inclusion of specific details on how to perform many diagnostic procedures.

In places, the terminology and definitions are not clear or vary from the usually accepted terminology. Examples include the definitions of purulent and non-purulent meningitis and encephalitis and encephalopathy. The statement that cerebrospinal fluid pleocytosis is necessary for a diagnosis of encephalitis is at

variance with the experience of most physicians concerned with infectious disease problems.

Perhaps the most serious shortcoming of this book is related to the various discussions of therapy. Basically, this is due to the omission of certain important principles presumably in the interest of brevity. These include the absence of details about administration of certain difficult drugs, such as amphotericin B, and failure to indicate parameters by which antibiotic therapy can be judged in bacterial endocarditis, meningitis, arthritis, osteomyelitis and others.

The major appeal of this book will be to medical students, family physicians and pediatric trainees. Its restricted nature limits its usefulness to the infectious disease specialists, and the consulting pediatrician. It should also be a useful reference book for the practicing physician who cares for children. *Harris D. Riley, Jr., MD*

Height and Weight of Children: Socio-Economic Status, United States. National Center for Health Statistics DHEW, Publication #(HSM)73-1601, 87 pp., Rockville, Maryland 20852.

The National Center for Health Statistics has released its second report on height and weight of US children 6 to 11 years of age from Cycle 2 of the Health Examination Survey. The first report analyzed and discussed data on height and weight by age, sex, race, and geographical location of the United States. This second report concerns the analysis and discussion of height and weight data further by considering some measurable socio-economic variables including classification by annual family income, educational attainment of parents and an urban-rural influence for this part of the survey. A nation-wide probability sample of 7,413 children was selected to represent the roughly 24 million non-institutionalized children 6 to 11 years of age in the US. Of these, 7,119 or 96%, were examined.

A consistent increase in both height and weight was found over the entire annual family income range reported, and over the entire range of parents' educational level. This positive correlation of children's size with family socio-economic status was true for all ages studied, both sexes, and for races.

It was found that even children from the very lowest socio-economic level in the US

were much larger than most of the children from all countries of the world except those countries which are culturally and technologically similar to the United States. There was no urban or rural difference.

The clinical and epidemiologic implications of children's size to health are discussed. *Harris D. Riley, Jr., MD*

NON-OPERATIVE ASPECTS OF PEDIATRIC SURGERY: WITH SPECIAL EMPHASIS ON SURGICAL NEO-NATOLOGY R. S. Owings. 146 pp., illustrated. St. Louis, Warren H. Green, Inc., 1973. \$10.00.

The author has attempted to bridge the area between pediatricians and pediatric surgeons by calling increased attention to the non-operative aspects of pediatric surgery. This concise textbook summarizes current medical aspects of problems and many of the conditions treated by pediatricians and pediatric surgeons. Since the vast majority of children requiring pediatric surgery are cared for by non-pediatric surgeons, this volume is timely.

The material is divided into 24 chapters. The first twelve of these cover general topics, such as nutrition, antibiotics and metabolism with particular emphasis on the special needs of the newborn infant. The remaining chapters are devoted to specific conditions, such as omphalocele, tracheo-esophageal fistula and others. Additional suggested reading is offered at the end of each chapter.

This should not be considered a complete textbook of pediatric surgery but it is a valuable reference. *Harris D. Riley, Jr., MD*

MEDICAL STATISTICS IN WORLD WAR II Frank A. Reister, 1215 pp. Washington, D.C., Superintendent of Documents, Government Printing Office, 1976. \$19.50.

This is another in the volumes which comprises the official history of the Medical Department of the United States Army in World War II and is prepared by the Historical Unit, US Army Medical Department. The information in this statistical volume is derived from more than 18,000,000 individual medical records reflecting the magnitude of the efforts required to care for the largest body of combat troops ever mobilized by this nation. The scope of the data includes battle casualties classified

by causative agents and anatomical locations of wounds, rates for non-battle disease and non-battle injuries, admissions by diagnosis and class, types of dispositions and death rates by cause. It is the definitive reference for the physician and others interested in statistical data regarding World War II. *Harris D. Riley, Jr., MD*

MAYES' MIDWIFERY: A TEXTBOOK FOR MIDWIVES Rosemary Bailey, S.R.N. Eighth edition, 530 pp., illustrated. Baltimore. Williams & Wilkins, 1972. \$25.00

This textbook is concise and updated. The first chapter demonstrates great insight into the complexity of views about parenthood that a midwife will encounter. Every American nursing and midwifery student would benefit from reading that chapter. The mechanics of labor and what is needed to recognize problems during labor are well described. There are also sections dealing with the mother and child in the puerperium. Deficiencies include the paucity of discussion of biochemical aspects of pregnancy and hematologic values in pregnancy and methods of carrying out clinical pelvimetry.

It can be recommended for what it was designed to be. *Harris D. Riley, Jr., MD*

HUMAN MALFORMATIONS British Medical Bulletin, Volume 32, No. 1, C. L. Berry, Editor, 98 pp., London, The British Council, 1976.

The British Council issues the Bulletin at regular intervals. Each issue treats some subject in depth. The contributors are usually eminent basic scientists and scientifically-inclined clinicians from Great Britain.

This issue on human malformations has articles on prenatal diagnosis, the genetics of common single malformations, environmental teratogens, and congenital postural deformities as well as others. As usual, the review articles in this issue are generally quite good. If there is any criticism of these publications it is that usually the information is available elsewhere, although not pulled together in the same fashion, and the layout of the articles, with few illustrations, is rather austere and discourages the average reader. *Harris D. Riley, Jr., MD* □

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Biomedical Hoaxes. III

ERNEST LACHMAN, MD

In our series on biomedical hoaxes we have reported on deceptions which had serious scientific consequences. By contrast, this contribution deals in a lighter vein with a harmless variant of hoaxes which might be identified as a prank or practical joke. Mischievous deeds of this kind are not easily traced in the literature because they were of no world-shaking consequence. However, they may, if uncovered, turn out to be quite humorous and educational.

Actually other fields of cultural endeavor may have utilized these pranks more commonly than biomedicine for exposing stodginess or phoniness. Sometime ago, H. Bowser published in the "Saturday Review" a number of hoaxes outside the biomedical field. The highbrow "Third Program" of the British Broadcasting Company presented at one time "the avant-garde work 'Mobile for Tape and Percussion' by the Polish composer Piotr Zak, one of the youngest and most controversial figures of modern music." Afterwards and with official BBC approval, the program was described by the network's own spokesman as follows: "We dragged together all the instruments we could and went around the studio banging them. It was an experiment to demonstrate that some contemporary compositions are so obscure as to be indistinguishable from tapes of percussion played at random. It was a serious hoax to set people thinking."

In 1944, an Australian poetry magazine, "Angry Penguins," invented a modern poet by the name of "Ern Malley" and published an abstract of his work which consisted of a collage of words and phrases, put together from sources such as a "U.S. Government Report on

Sewage Disposal Techniques." The magazine, "Angry Penguins" acclaimed Malley as one of the two giants of contemporary Australian poetry. It was of course meant to be a devastating condemnation of the snobbish and phony attitude of some modern critics.

One last example might be given. The famous Broadway producer David Merrick, annoyed by the negative newspaper reviews of one of his recent plays by the most prominent critics, published a full-page advertisement in a well known New York newspaper containing glowing endorsements of his play which was signed by the names of six leading New York critics who had panned the work previously. The hoax consisted, of course, in the fact that Merrick had found six New York residents with the same name as the famous critics, who were willing to lend Merrick their names for the advertisement.

Coming to the biomedical field, it may be recalled and quoted from numerous references that the famous writer and critic H. L. Mencken claimed that the first bathtub was installed in the White House in 1851 at the request of President Millard Fillmore. The precedent-breaking device was supposed to have aroused widespread criticism and ridicule which, in part, originated from the medical profession. Mencken's story was generally believed and quoted until recently by well known medical writers and health workers, although Mencken himself exposed the report as a fake (C. D. MacDougall).

One of the funniest medical jokes was the Coudé hoax. As I recall from my training, the Coudé catheter is characterized by an angula-

tion that corresponds to the angle of the male urethra. Coudé in French means elbow, which of course is the true reason for the name Coudé catheter. According to an article by Saul Jarcho, the student society of the Welsh National School of Medicine in Cardiff, published in 1957 in their journal "The Leech" a biography of a fictitious Dr. Emile Coudé (1800-1870), who had invented the Coudé catheter. The article was pretentiously published with footnotes and also carried a photograph of the famous inventor. At least one well known surgical textbook, which was being published in a new edition, used this spurious information until the hoax was uncovered. The pages had to be reset and the bibliography changed. The intention of the editors of the Welsh journal was of course to lampoon the stodginess of many scientific articles. The editors' point was driven home even more forcefully, when both "The Lancet" and "The British Medical Journal" were carrying a flurry of letters pertaining to the phony story.

In their famous biography of William Henry Welch, one of the giants of American medicine, the Flexners describe a practical joke pulled on the equally famous Dr. Halsted. After climbing the steps of the Maryland Club, Welch complained to Halsted of a sharp pain in the region of his heart. The surgeon put his ear to Welch's vest in the region of the heart. To his surprise, he felt such a chest-raising palpitation that he became very alarmed. Actually, Welch had concealed a small rubber bulb under his shirt which he made pulsate by squeezing another bulb in his pocket.

Another famous hoax was committed by a well-known contemporary of Welch. Egerton Y. Davis published in the "Correspondence" column of "Medical News" in 1884, the following case history:

I was sent for, about 11 p.m. by a gentleman whom, on my arriving at his house, I found in a state of great perturbation, and the story he told me was briefly as follows:

At bedtime, when going to the back kitchen to see if the house was shut up, a noise in the coachman's room attracted his attention, and, going in he discovered to his horror that the man was in bed with one of the maids. She screamed, he struggled and they rolled out of bed together and made frantic efforts to get apart, but

without success. He was a big burly man, over six feet, and she was a small woman, weighing not more than ninety pounds. She was moaning and screaming, and seemed in great agony, so that after several fruitless attempts to get them apart, he sent for me. When I arrived, I found the man standing up and supporting the woman in his arms, and it was quite evident that his penis was tightly locked in her vagina, and any attempt to dislodge it was accompanied by much pain on the part of both. It was, indeed, a case "de cohesione in coitu". I applied water, and then ice, but ineffectually, and at last sent for chloroform, a few whiffs of which sent the woman to sleep, relaxed the spasm, and relieved the captive penis, which was swollen, livid, and in a state of semi-erection, which did not go down for several hours, and for days the organ was extremely sore. The woman recovered rapidly, and seemed none the worse . . . In this case there must have been also spasm of the muscle at the orifice, as well as higher up, for the penis seemed nipped low down, and this contraction, I think, kept the blood retained and the organ erect.

This report was frequently cited, particularly in textbooks of gynecology, as an example of a rare complication of the sex-act. It is even more surprising to find the name of Egerton Y. Davis, the author, as an entry in the index to Harvey Cushing's, *Life of Sir William Osler*, only to be referred to the medical index listing: Osler, Sir W. — personal characteristics-practical jokes. Perusal of these latter references reveals that Osler availed himself of the pseudonym, Egerton Y. Davis, for many pranks (36 references). He even signed Davis's name in hotel registers and used it as a signature for light humorous poems. As Cushing in his biography explains, one of Osler's coeditors of the "Medical News" had written a pseudo-learned editorial entitled "An Uncommon Form of Vaginismus" in which he quoted many sources back to Roman classical writers. This provoked Osler to write this imaginary case report, signing it "Egerton Y. Davis." Long before this he adopted this name as an identification of his alter ego whenever his impish nature induced him to lampoon some of his more stuffy friends and acquaintances, or even himself. Once he wrote a book review in which he pointed out an extraordinary mistake in

Osler's work, and signed it, "EYD." His irrepressible spirit induced him to sign one of his last letters, written one month before his death, "EYD."

I have discussed the anatomical basis of this vaginal spasm in my book, *Case Studies in Anatomy*, and gave medical references in a letter to the editor of "The New Physician" in 1968. This is neither the place, nor am I qualified, to describe the multifaceted personality and greatness of William Osler, who has been worshipped in rhapsodic terms as a clinician, teacher, and scientific and medical reformer. Osler himself would have disliked this deification. He wanted first and foremost to be regarded as a human being with all its strength and weaknesses. Even as a boy he displayed an overwhelming streak of mischief that led to his expulsion from two grammar schools. He was

always a leader in boyish pranks. Throughout his life he kept this puckish side of his personality. It is one of Osler's most attractive features that he disliked stodginess and pomposity and tried to unmask them whenever he could. He enjoyed nothing more than to prick over-inflated egos and our story here is just one example of this trait.

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In my first few weeks as President of Oklahoma State Medical Association, I have become intimately aware of the significant work of the various OSMA councils and committees. A few words of appreciation are in order. The association's total program is an effective combination of awareness of the problems of Oklahoma medicine, objective planning on both a short and long-range term basis, and timely implementation. All of these factors are welded together by the conscientious and aggressive leadership of the council and committee chairmen, and by the all important participation of dozens of individual OSMA members. Their contribution of time and effort is staggering in its aggregate, and we all owe a great debt to them.



Some brief comments on selected activities of three of our key councils:

Three splendid 30-second public service announcements have been produced by the Council on Professional and Public Relations, under the chairmanship of Doctor M. Joe Crosthwait, for airing on the state's television stations as public service announcements. They were made by talented and experienced TV professionals, and are tastefully structured to capture the viewer's attention. The topics are the desirability of arranging for a physician in advance of actual need, effective immunization programs on a continuing basis, and proper utilization of the hospital emergency room. The OSMA House of Delegates was tremendously impressed by these announcements, as you will be, and has authorized three more for early production. I believe the increased use of the powerful medium of television will do much to enhance the public image of the Oklahoma physician, and more importantly will provide valuable guidance on health care problems to our patients.

The Council on Medical Education, under the leadership of Doctor Floyd F. Miller, is moving ahead rapidly with detailed planning for OSMA's expanded program of continuing medi-

cal education. The initial objective is to make every Oklahoma doctor aware that, beginning January 1st, 1981, he must hold a valid AMA Physician's Recognition Award as a requirement for continuing membership in Oklahoma State Medical Association. Doctor Rutledge W. Howard of American Medical Association was in Oklahoma last month to finalize OSMA's new role in surveying institutions for accreditation of continuing medical education courses by the AMA Council on Medical Education. This will allow Oklahoma physicians to obtain CME credit for courses and educational activities in their own cities and state, and will do much to reduce the mechanics of complying with PRA requirements. At the same time, this new function should be a great stimulus to continuing medical education activities in our hospitals and institutions.

The Council on Governmental Activities, under the direction of Doctor Perry Lambird, has been deeply concerned at the Administration's Hospital Cost Containment plan. It has joined with our hospitals to convey to congressional leaders, and to the people of Oklahoma, the inescapable conclusion that this CAP on spending is economically unworkable and will not only result in second-rate care, but for many, care will simply become unavailable. Judging from congressional apathy toward the proposal, our national lawmakers are increasingly aware of the shortcomings of this ill-conceived measure.

Another serious concern has been the Talmadge Bill of Medicare-Medicaid reforms, aimed at cutting rising federal health care costs. While American medicine has been a major advocate of responsible, effective reforms that will curb abuses and bring workable policies on federal health expenditures, the Talmadge bill is not the answer. In its effort to provide an instant solution, it succeeds only in compounding the problem with an expanded federal bureaucracy and increased red tape. With hospitals in many states already undergoing fiscal hardships because of present low payment levels under Medicare and Medicaid, the Talmadge Bill could squeeze some of them to death. The Council will continue to work against these proposals, which, if enacted, would have disastrous effects on the quality and quantity of health care in the United States.

Sincerely,

C. S. Lewis Jr. M.D.

The Management of Meningomyelocele

R. LEE AUSTIN, MD
HARRIS D. RILEY, JR., MD

The prevailing methods of treatment of meningomyelocele – early, delayed and none – are reviewed and the prognosis of this malformation discussed. Because of the multiple problems, the preferred approach to the management of such patients involves a group of specialists operating as a team.

Spina bifida cystica (a defect of the neural arch associated with either a meningocele or a meningomyelocele) (see *Embryology*) is the most common severe congenital anomaly of the central nervous system. Its incidence ranges from 1.3 to 3.86 per 1,000 live births with considerable regional variation.¹⁻³ Although no definitive cause has been determined, a number of environmental influences have been and are being investigated.³⁻⁶ Genetic susceptibility appears to play a role since couples who have had one child with spina bifida cystica have a

five percent to eight percent chance that subsequent offspring will be similarly afflicted. When two children are involved, the risk rises to one in four for future infants.⁵ There appears to be an etiologic linkage with anencephaly.

EMBRYOLOGY

The neural tube of the fetus develops from thickened dorsal surface ectoderm, the neural plate, during the second week after conception. The meninges start forming from a mesodermal anlage, and the first traces of the vertebral column can be recognized. By the fourth week, the neural tube is completely closed, and at the end of three months the neural arches have developed and fused dorsally.^{2, 7}

Spina bifida results from incomplete closure of the neural arches. When only the spinal canal is involved, the defect is termed "spina bifida occulta." Protrusion of the contents of the spinal canal is known as "spina bifida cystica" and is further divided into meningocele, in which only the meninges filled with cerebrospinal fluid protrude, and meningomyelocele, in which the spinal cord and its nerve roots also spill out into the sac.

STATUS AT BIRTH

At birth, these defects are generally surrounded by a bluish, semi-transparent membrane representing the meninges. The myelocele is often flat, only later bulging with

From the Department of Pediatrics and the Birth Defects Center, Children's Memorial Hospital, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma. The Birth Defects Center is supported by a grant from the National Foundation.

the accumulation of fluid. Above the lesion, the spinal cord frequently shows abnormalities such as hydromyelia, diastematomyelia, cysts, syringomyelia, or gliosis. If the lesion is high on the spinal axis, the spinal cord may reform below it into a relatively normal structure.⁶

The condition of a child with meningo-myelocele is often much better at birth than it is a few hours later. Occasionally, the lesion spontaneously epithelializes from the surrounding skin without much inflammatory fibrosis. More often, the meningo-myelocele leaks or bursts and the raw neural plate becomes infected, with the ensuing inflammatory reaction and scar formation damaging the spinal cord tissues. Stretching from the accumulation of fluid, drying, and infection or the medications used to treat it all contribute to the deterioration in the neurological status.^{2, 6, 7}

PROGNOSIS

It is usually not difficult to differentiate meningocele from meningo-myelocele; however, in some cases a definite diagnosis may not be established until operation.² In a true meningocele, there should be no neural elements in the sac other than small peripheral nerves.² For these patients, the prognosis is good. They survive, rarely develop hydrocephalus, generally have little physical disability, and show a normal range of intelligence quotients. The bulk of spina bifida cystica cases, however, are patients with meningo-myeloceles which are always associated with some degree of neurological impairment, the extent of which depends upon the location of the lesion and the degree of myelodysplasia (abnormalities of the spinal cord). These patients frequently suffer paralysis, neurogenic bowel and bladder, hydrocephalus and most have intellectual capacity in the dull or dull normal range.

However, no criteria have yet been devised which are completely accurate in predicting a child's potential at birth. This has fueled the controversy surrounding treatment for patients with meningo-myelocele. The crux of this controversy revolves around early versus late (or no) closure of the meningo-myelocele.

Prior to the early 1950's the operative results of treating meningo-myelocele and hyd-

rocephalus were very discouraging. The generally recommended regimen for spina bifida was delay in treatment until the child was one year to 18 months of age by which time epithelialization of the sac was complete, the hydrocephalus had stabilized, and the mental endowment could be evaluated. Advances in surgical and medical care of the newborn have now made it technically possible to close the meningo-myelocele shortly after birth. Advances in shunt technology and the use of antibiotics have provided more standard treatment of hydrocephalus. Thus, it is important to compare the results of no treatment or delayed treatment of meningo-myeloceles with the results of vigorous early treatment.

Prognosis of Untreated Meningo-myelocele. There are only a few studies of children with meningo-myeloceles who have received no therapy. Laurence^{3, 9} studied children with encephaloceles and spina bifida cystica born in South Wales between 1956 and 1962, before active surgical treatment was available. He reported that 16% survived 2½ to 9 years. These children received "elementary hygiene to the spinal lesion and antibiotic cover or no treatment at all." Knox¹⁰ followed 132 patients with spina bifida cystica with or without an accompanying encephalocele, who had received no systematic therapy. He found that 24% were alive at one year. Of the 27 surviving, 13 had no neurologic deficit or hydrocephalus, and presumably represent patients with meningoceles. Fourteen of the survivors had neurological disability; only four of these had early closure; four had shunts and late operations (six weeks to ten months); and four received no therapy. Thus, even with no therapy, approximately 20% of children will survive.¹¹

As Freeman¹¹ points out, these figures are in a sense misleading. They indicate that there is significant survival and that the children who survive have a significantly greater mental and neurological handicap than they would have had they been treated. However, according to Freeman,¹¹ the results do not provide sufficient information about the children who died and about the weeks and months of chronic care while waiting for death to come. Thus, the series gives little information about the considerable morbidity involved in no treatment. Since stillbirths account for a significant segment of the mortality in both series, Freeman¹¹ has analyzed the results re-

garding infants who were alive at 24 hours as representative of the potentially treatable group. In Laurence's series, of the 297 infants alive at 24 hours, 188 (63%) were alive at one month; 136 (46%) were alive at two months and 96 (32%) were alive at six months. Sixty eight (22%) survived more than two years. In Knox's series, 71% survived one month, 52% survived six months; 35% survived one year; and 30% survived five years.¹⁰

Using a different form of analysis of selected patients seen between 1947 and 1956, during the antibiotic era, but before enthusiastic surgery and shunting procedures became available, Laurence⁹ found that a newborn infant had a 35% chance of survival to age 12 years. A two-month-old infant with meningo-myelocele had a 44% chance of surviving 12 years.

As Freeman¹¹ states, the important facts to be gained from these series are that many children who are left unoperated do not die and that many of those who die linger for months.

Freeman¹¹ counters with the view of Lorber¹² who stated that the large majority of infants do not live long if untreated. Freeman¹¹ comments, "This is true, but the large minority do live long and at best have more neurological deficit than if treated. Therefore, if one elects not to treat the child with a meningo-myelocele he must be prepared to cope with the child who survives."

Prognosis of Vigorously Treated Meningomyeloceles. Early operation and new techniques have led many groups to enthusiastic treatment of all children with meningo-myeloceles. Sharrard et al¹³, in a controlled series, found diminished mortality, infection, length of hospital stay and dysfunction in the lower extremities in those treated early. Sharrard, Zachary and Lorber¹⁴ reviewed another series of patients referred to them and operated at varying times. They found that operations within the first four days decreased the mortality in comparison with those operated after four days or managed conservatively. Mortality was higher in infants with hydrocephalus than in those without, but the incidence of hydrocephalus was not increased by early operation. Early surgical intervention decreased the mortality of those with hydrocephalus. These authors reported that infants operated on in the third or fourth day of life had more paralysis than those operated on earlier but less than those with no op-

eration. Of infants surviving three years, 35% of those with early operations had normal or nearly normal lower extremities. Only 12% of those with late closure had function of this degree. Only in sacral lesions was there no difference in residual paralysis with earlier operation. These workers concluded that there was no place for selection of patients for conservative rather than operative treatment on the grounds of paralysis, deformity or hydrocephalus present at birth. Mawdsley and Rickham¹⁵ in their series, found that 70% of operated cases survived and that only 10% required special schooling because of mental impairment. Almost half could walk reasonably well with crutches.

In a recent review of the Sheffield series, Lorber¹² was less enthusiastic about treatment for all patients. In reviewing his large series of vigorously treated patients, he found that only seven percent treated in this fashion "have less than grossly crippling disability and may be considered to have a quality of life not inconsistent with self respect, earning capacity, happiness and even marriage." Eighteen percent of the survivors were severely handicapped physically and were retarded and 59% of the patients had died. In addition, 15% of the survivors have severe hydronephrosis and a limited life expectancy. Lorber¹² also found that patients with hydrocephalus had more severe sequelae and higher mortality. The prognosis is also related to the site of the lesion mainly because of the hydrocephalus. Children with cervical, thoracic or sacral defects have a lower incidence of hydrocephalus, a higher rate of survival and less intellectual handicap.

In order to spare children and their families prolonged suffering and to give better attention to those who are more likely to benefit from total care, Lorber^{12, 16} has developed criteria for selection of those who should not be treated. He proposed that infants who have any one or any combination of the following should not be given active treatment but should be given normal nursing care together with any symptomatic treatment to avoid pain, discomfort, or convulsions. These criteria are:

1. Gross paralysis of the legs (paralysis below third lumbar segmental level with at most hip flexors, adductors, and quadriceps being active),
2. Thoracolumbar or thoracolumbosacral malformations related to vertebral levels,
3. Kyphosis or scoliosis,
4. Enlarged head with maximum circumfer-

ence two cm or more above the 90th percentile related to birth weight,

5. Intracerebral birth injury,

6. Other severe congenital defects such as cyanotic heart disease, ectopia of the bladder, and mongolism. Further, no active treatment is advised for those children who after closure develop meningitis or ventriculitis and who already have serious neurological handicap and hydrocephalus, or later, if any life-threatening episode occurs in a child who is severely handicapped by gross mental and neurological defects.

When any one of these signs is present, as is the case in about 50 percent of spina bifida cystica patients, he recommends supportive nursing care only. With this management, none of 34 untreated infants lived to nine months of age, and half were dead before one month. Several other recent reports claim the overall results of selective early operation compare favorably with those of conservative management or routine operation.^{17, 18} Freeman¹¹ has reviewed the data for each of these criteria.

In summary, Lorber^{12, 16} finds that of patients who have major adverse criteria at birth, including severe paralysis, 50% are dead but 40% of the survivors have normal IQ. Of the patients who had no adverse criteria at birth, 23% are dead, but 50% have severe sequelae and 14% are retarded. He concludes by stating that "only those should be given active treatment who could look forward to a life without great handicaps."

Freeman¹¹ points out that there is no doubt that little can be done to repair the neurologic

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deficits of children with meningomyeloceles. Therefore, approximately 50% of the afflicted children will always have severe paralysis. The degree of paralysis is largely predictable at birth. Early surgery can only preserve function. He points out that the mortality from hydrocephalus, ventriculitis and renal disease, is, however, susceptible to considerable improvement and the intellectual residual should also improve with care of the hydrocephalus and ventriculitis. As Laurence¹⁹ points out, the bulk of patients with meningomyeloceles have significant associated disability and retardation.

A similar dissatisfaction with the results of vigorous treatment developed among staff members at Children's Hospital of Philadelphia. In 1968, Ames and Shilman²⁰ reported that among 50 consecutive cases of infants with meningomyelocele who received early, intensive treatment, 62% of the survivors had developmental quotients compatible with "competitive, independent life." "To postpone early closure of the leaking sac," they concluded, "makes all therapy more difficult and more prolonged." Again in 1972, comprehensive, coordinated treatment of all children with meningomyelocele, regardless of the extent of the lesion, was recommended.²¹ These workers²¹ contended that, since no infallible criteria for determining potential at birth have evolved, all children should be operated upon to close the defects and relieve the hydrocephalus. Two years later, however, they admitted dissatisfaction with the high incidence of mental retardation present, even among those patients vigorously treated, and proposed a selection protocol.²² Lacunar skull deformity (LSD) was found to be strongly associated with mental retardation, and early surgery was not recommended for children with LSD and other adverse criteria similar to those Lorber^{12, 16} described.

Shurtleff and co-workers^{23, 24} believe that the crux of treatment of myelodysplastic patients is to avoid neglecting a potentially functional child on the one hand and the perpetuation of rejected, brain-damaged cripples on the other. These workers estimate that the presence in a normocephalic infant of a one cm frontal cerebral mantle or an absence of gross brain malformation, infection, or trauma in children with 60% of the brain mass is consistent with later normal intellectual development. Immediate, complete assessment for brain mass

and function and other system anomalies were documented before treatment of 371 patients. Of these, 283 had maximum treatment because their brain mass was estimated to be 60% of normal, or greater, and there were no major complications. The others were treated symptomatically. Seventy-five percent of patients with normal intellect but paralyzed at high levels and 90% to 95% of those paralyzed at low levels survived with maximum treatment. Of the patients treated only symptomatically because of criteria excluding maximum treatment, 10% survived to the age of 2½ years. There was a slightly better survival in a group treated symptomatically (42% survival to teenage) before establishment of selective criteria. These investigators conclude that children with meningocele should be treated when parents knowingly accept the ultimate outcome or when doubt of potential exists.

Other groups have reported that approximately 50% of children born with functional thoracic or L₁, -L₂ level motor lesions have significant retardation regardless of brain mass, absence of complications and adequacy of hydrocephalus treatment.^{12, 25, 26}

Various centers have reported a 10-17% survival to adulthood of meningocele patients.²⁷

Freeman¹¹ concludes that there are three alternatives open to the physician faced with a child with a meningocele:

1. To actively treat — closing the spinal defect, shunting the hydrocephalus, and offering continuing pediatric, urologic, orthopedic, and psychologic care.

2. Not to treat — with the attendant high mortality but high rate of survival until the patient eventually dies from meningitis, progressive hydrocephalus or advancing renal disease.

3. To terminate life, actively or passively. He further states that active euthanasia might be the most humane course for the most severely afflicted infants, but is illegal. "Passive euthanasia" is legal, but is inhumane. Therefore, "in an ambivalent fashion we feel that virtually every child should be given optimum care." Such a series of alternatives has been challenged by others.²⁸

Shurtleff²⁷ has also commented on the social, economic and ethical aspects of selection criteria for therapy and of treatment.

Whether the back defect is open or closed, almost all those who survive have multiple deformities necessitating both medical and surgical care. The National Foundation has established birth defects centers throughout the country to give comprehensive care, carry out research, and provide training. One such center is located at Oklahoma Children's Memorial Hospital (OCMH), where a group of specialists operates as a team. The Clinical Study Center for Birth Defects evaluates meningocele patients on both an inpatient and an outpatient basis. Regardless of the presenting problem, patients with meningocele are admitted to the Meningocele Service. Their care is directed by the Pediatric Service, which in turn notifies other members of a multi-disciplinary team. After discharge, the patient is followed in the Meningocele Clinic of the Clinical Study Center for Birth Defects.

It is in the clinic setting that the full value of the team approach is realized. For several years, patients have been seen in a special Meningocele Clinic which incorporates participation by the pediatric, orthopedic, urologic, neurosurgical and physical therapy services. Referrals come from all over Oklahoma as well as Arkansas, Texas and Kansas and other neighboring states. Each year about 150 children and infants are treated, 85% of which are "regulars" who return for check ups every six months or a year. After age 21 years, patients are referred to the adult urology, orthopedic, and general medicine clinics, or their physician may request that they continue to be seen in the Meningocele Clinic.

The pediatrician's role as leader of the team of specialists is to care for the whole child. He correlates the recommendations of the other specialists and explains what they mean in terms of the child's ability to become independent. He may have to tell parents that their child won't be fitted with braces and will never walk, but that he'll be a "good sitter." The pediatrician examines eyes, ears, nose and throat, treats adolescent acne, and advises parents on techniques of child rearing much as he would for a nonhandicapped child. The usual teenage uncertainties about sex will be magnified in the paraplegic patient, and the pediatrician may recommend counseling for both parents and child. He is also aware of special groups in the community to aid families

with handicapped children. Any other problems connected with the child's mental, social, or physical health will be handled by the pediatrician.

The neurosurgeon's role in the management of meningocele is concentrated in the first few days of the infant's life. He will evaluate the child's neurologic status and make a recommendation whether surgery to close the back or control hydrocephalus is appropriate. Since neurological function is not improved by surgery, the principal purpose of closure is to prevent infection and further damage to the spinal cord. At surgery, the sac is excised and nerve roots and meninges are undermined to allow for later growth. When the neurosurgical repair is complete, a team of plastic surgeons closes the defect with rotation flaps. Early skin closure cuts the incidence of meningitis, and cases that do occur respond to antibiotic therapy. The plastic surgeon is not generally required to treat the child after initial closure of the lesion unless pressure ulcers occur and additional skin flaps are needed.

Hydrocephalus is one of the most serious complications of spina bifida cystica and usually becomes evident by the age of six weeks. If it is progressive, a ventriculoperitoneal shunt (VP) is inserted. Since excess tubing can be banked by coiling it in the peritoneal cavity, the VP shunt requires revision to allow for growth less often than does an atrioventricular shunt.

A majority of surviving meningocele patients have urinary incontinence and chronic, persistent urinary tract infection. After the age of two years, chronic renal failure is the principal cause of death. Hydronephrosis with infection and bilateral chronic pyelonephritis are frequently fatal complications. Thus, urologists treating the child generally order an intravenous pyelogram at least once a year and a urine culture at each visit. The incidence of renal infection can be lessened by prescribing long-term, antibacterial drugs; sulfisoxazole (Gantrisin) is commonly used at OCMH. Since early upright positioning may help to prevent urinary stagnation, the physical therapist is called in to show parents how to use slant boards to support the child in a standing position.

For small children, the urologist instructs parents to use the Crede method of manually

expressing residual urine from the bladder. Later, catheterization performed by the patient or his parents, or the use of an ileal loop for urinary diversion are preferred methods of management. At some centers, internal prosthetic sphincters are being used with increasing success.²⁹

The regular use of enemas and suppositories may help parents to routinize the child's bowel movements. In older patients, fecal incontinence may be controlled by using constipating drugs and enemas or by having a colostomy done by a general surgeon.

Although the pediatrician directs the child's total health care program, it is often the social worker's responsibility to see that the regimen is followed. She assists the family in finding everything from a new supply of ostomy bags to sources of financial aid. In Oklahoma, the County Commissioners or the Red Cross may even help with transportation expenses. As the child grows up, the social worker advises parents on school placement, whether the child should enter a special school for the handicapped or a regular school. If the family chooses a regular school, the social worker can locate a classroom aid, paid by Federal funds, who can push a wheel chair or change diapers. If a family is having difficulty adjusting to the handicapped child, a psychologist may also be called in for counseling.

Adjustment problems may worsen as the child grows older and his handicaps seem more limiting. Some patients in their late teens have completed job training programs and work in offices, but pressure sores and urological problems still cause them to lose time from the job. A weight problem which was manageable in childhood may become so severe as to force previously ambulatory patients back to a wheelchair. Failure to fulfill their expectations of themselves is particularly troublesome to these patients. A young girl who had hoped to drive a car, marry, and have children may find herself confined to a carrier at age 20.

Even the most sophisticated technology and energetic treatment cannot change the paralysis and retardation so often consequent to meningocele. The most realistic goals of therapy are to relieve suffering and avoid secondary complications. Medication to prevent urinary tract infections, braces to hold the body straight, and meticulous shunt maintenance to forestall the complications of hydrocephalus can help to preserve the child's quality of life.

Great progress has been made recently in the antenatal diagnosis of neural tube defects. Raised levels of alpha fetoprotein in the amniotic fluid and possibly in the mother's blood have been found to be associated with anencephaly and meningomyelocele in the fetus.³⁰ Although prenatal diagnosis can help to reduce the incidence of meningomyelocele present at birth, the ultimate solution must be to find and eliminate the cause of this severe deformity.

In summary, the multiple problems of the meningomyelocele patients are best approached by a group of specialists operating as a team.³¹ Once the decision is made to undertake intensive treatment, every possible advantage ranging from a VP shunt to physical therapy is made available to the child. □

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Hair Transplant Surgery: Patient Selection

O'TAR T. NORWOOD, MD

Proper patient selection is essential for consistently good results with hair transplant surgery. Factors to be considered are age, cardiovascular status, pattern and extent of alopecia, future hair style, and color and texture of hair.

Factors to be considered when evaluating patients for hair transplant surgery fall into two major categories: (1) factors concerning general health and (2) factors confined to the scalp.

GENERAL HEALTH FACTORS:

1) AGE: Contrary to previous statements I have made¹, I no longer consider advancing age a contraindication to hair transplant surgery. Vanity may not increase with age, but as more and more of the evidences of youth are lost, the desire to have them restored increases. Many older individuals request hair transplant surgery. I accept them as long as they qualify in other respects.

Youth, on the other hand, in itself can be a contraindication. This is primarily because the

results of hair transplantation are not always perfect. Transplanted hairlines may be tufted, abrupt or cobblestoned. Slight hypertrophic scarring can occur causing a decrease in the number of viable hairs per graft and an overall low density in transplanted areas. Informed of these possibilities, young individuals with only a slightly recessed natural hairline may find it more acceptable than a transplanted hairline that is slightly more anterior or only rearranged.

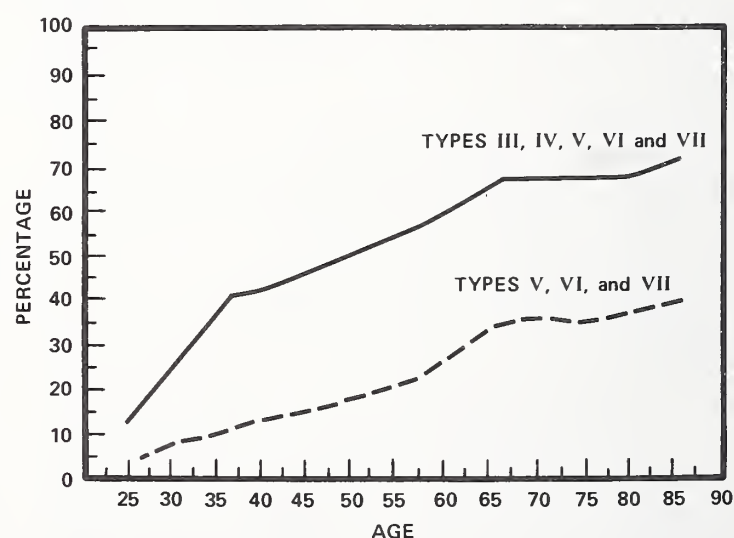


Figure 1 — The incidence of cosmetically significant male pattern baldness, (Types III, IV, V, VI and VII) increases steadily with age and is represented by a solid line. The incidence of baldness characterized by only a remaining horseshoe shaped fringe of hair, (Types V, VI and VII) is depicted by the dotted line. "From Norwood, O'Tar T., *Hair Transplant Surgery*, 1973. Courtesy of Charles C. Thomas, Publisher, Springfield, Illinois."

Many young individuals, 18 or 19 years of age, when they first develop a masculine hairline will inquire about hair transplant surgery. Hair transplants should be planned and designed for the amount of hair that will eventually be lost (see Figure 1). In these young individuals it is frequently impossible to predict the eventual amount of hair loss. Surgery should be delayed until at least an approximation can be made of how much hair will ultimately be lost.

2) **CARDIOVASCULAR SYSTEM:** Because there is a considerable amount of anxiety associated with the procedure, and relatively large amounts of epinephrine are used to control bleeding, it is important that individuals have no history of cardiovascular difficulty. Patients with previous myocardial infarction, angina, arrhythmia and strokes should be rejected or screened very carefully. Mild hypertension is not a contraindication.

3) **BLEEDING TENDENCY:** Individuals with history of bleeding should be screened and carefully evaluated prior to surgery.

4) **HYPERTROPHIC SCARRING:** Individuals with history of excessive scar formation should have a few test grafts done in an incon-

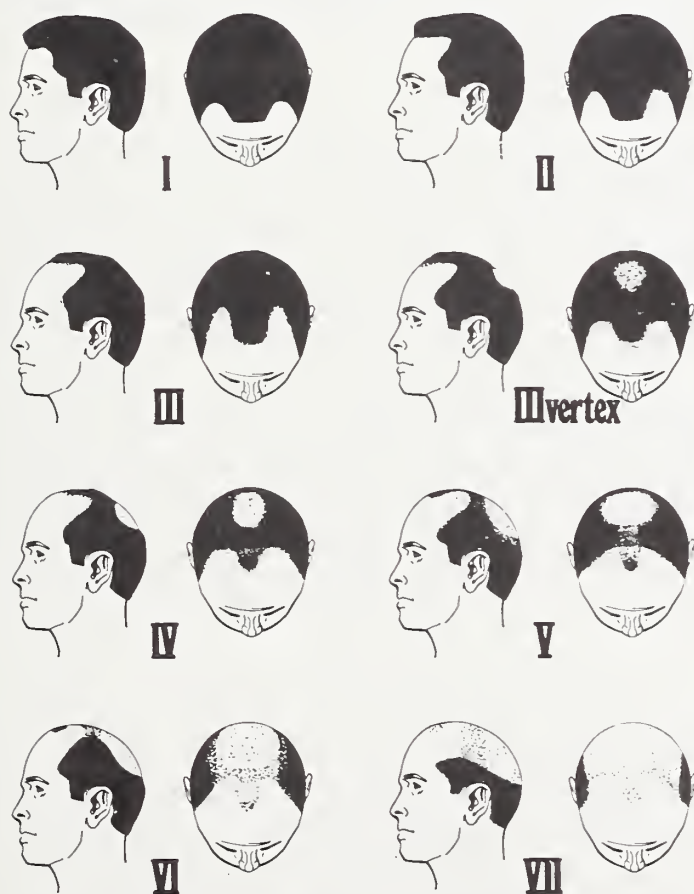


Figure 2 — Typical stages of male pattern baldness. Not all individuals will fit a given sequence precisely, but most subjects can be classified approximately. "From Norwood, O'Tar T., *Hair Transplant Surgery*, 1973. Courtesy of Charles C. Thomas, Publisher, Springfield, Illinois."



Figure 3 — Individual with Type IV pattern. Fifteen grafts at hairline were placed there the day before.



Figure 4 — Same individual as shown in Figure 3 nine months after 400 grafts.

spicuous area and examined four months later for hair growth prior to beginning extensive grafting.

LOCAL FACTORS

1) **PATTERN AND EXTENT OF ALOPECIA:**² The single most important local factor is the pattern and extent of the hair loss (see Figure 2). The best candidates are those in

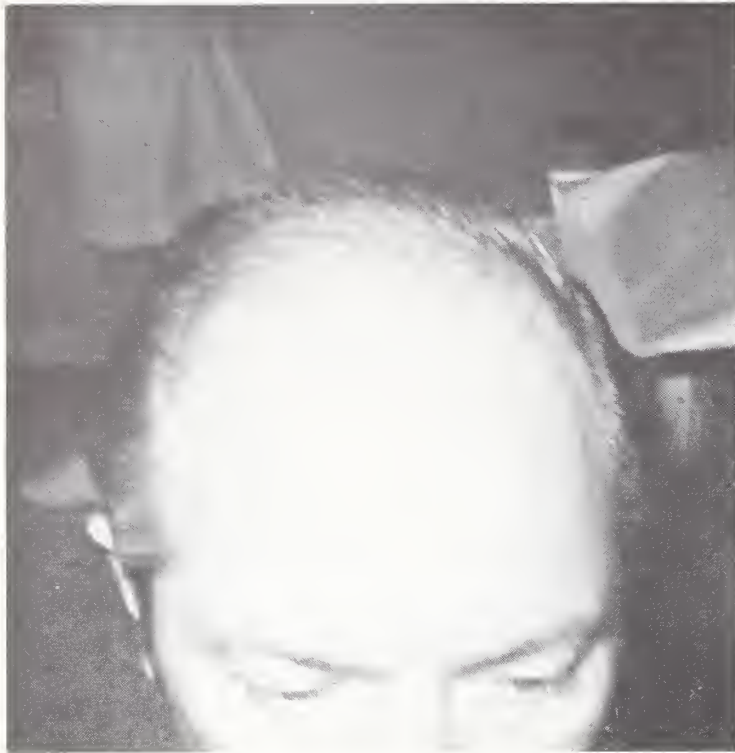


Figure 5 — Thirty-nine-year-old Type V individual with light-brown coarse hair. Small papules in bald area are grafts done one month earlier. Hair is temporarily lost from grafts following surgery. Permanent hair appears at 10 to 12 weeks.

the middle of the spectrum, ie, advanced Type III's and Types IV and V (see Figures 3, 4, 5, 6). The most difficult or marginal candidates are those at the ends of the spectrum, ie, Types I and II, early Type III's and Types VI and VII.

Types I, II and III are greater risks for two reasons: (1) the degree to which they can be improved even with optimal results is minimal, (2) the risk of having an even less acceptable cosmetic appearance after surgery is high.

Types VI and VII are marginal for obvious reasons (see Figures 7, 8, 9). There is a smaller amount of donor hair and a larger amount of recipient area. Grafts at the hairline are going to show and should blend as well as possible

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Figure 6 — Same individual as shown in Figure 5 one year following 359 grafts.

with the skin. They should not appear tufted and the hairline should be as natural as possible because it will probably be exposed. Types VI and VII require careful planning and if a satisfactory design cannot be created they should be rejected.

Male pattern baldness is a progressive condition (see Figure 1), so age again becomes an important factor at this stage of the evaluation. Not only must the existing amount of baldness be considered, but also the anticipated hair loss that will occur over the next 10 to 40 years. Younger individuals of course can be expected to lose a lot more hair, so the ultimate pattern should be anticipated as nearly as possible. Hair prior to permanent loss becomes thinner, finer, shorter, less dense and does not grow as fast as in years prior to permanent loss. Close inspection for this type hair is helpful in determining the eventual pattern.

2) **TEXTURE AND COLOR OF THE HAIR:** Dark coarse hair covers better than fine light hair, so fewer grafts of dark hair will be required to cover the same area as the light or blonde hair. Light-colored hair may not cover as well, but produces less contrast with the skin, and usually a more natural final result if enough grafts are used. Coarse hair covers better and is always preferable to fine hair. Gray hair is always coarse, does not contrast sharply with the skin, and usually produces a good result.



Figure 7 — Fifty-year-old male with graying blond hair and a Type VI pattern. Blond and gray hair produces little contrast with the skin and hairlines usually appear very natural. Because of the extensiveness of the hair loss and the color of the hair, it is anticipated that this patient will be able to comb his hair straight back. Grafts, therefore, will be crowded along the hairline and decreased in density posteriorly. Thus, when hair is combed back over the area of fewer grafts apparent full coverage can be achieved with relatively few grafts.

Color and texture of the hair is important in anticipating how the patient will style his hair when the hair has grown in. If the hair is of light color or gray, he is more likely to style his hair with the hairline exposed (See Figures 7, 8, 9). Patients with dark hair and light colored skin are more likely to prefer a forward and an across hair style that will cover the hairline. Consideration of these factors during the initial planning and designing phase helps in placing grafts where they will do the most good and afford the most coverage.

ABILITY AND EXPERIENCE OF SURGEON

Almost as important as the qualifications of the patient are the qualifications of the surgeon. This of course is true to some extent in all forms of surgery, but is particularly true in hair transplant surgery because it is unique in a number of ways.

1) Although it was introduced in 1959 by Orentreich³, hair transplant surgery is just now becoming a commonly performed procedure, and the training for it is far from uni-



Figure 8 — Same patient as shown in Figure 7 four months after one session of 50 grafts. The area is about 2 cm in length.



Figure 9 — Same patient after 300 grafts, eighteen months later.

form. Most physicians performing the procedure learned by observing in other physicians' offices, and have had no formal training specifically with it. Residency programs are beginning to incorporate hair transplant surgery in their curriculum, and improved overall competence with the procedure can be expected in the future.

2) It is a minor procedure performed in the office and receives no peer review. Also, since it is an office procedure, there are no hospital

Hair Transplant / NORWOOD

restrictions or regulations regarding qualifications for anyone performing it.

3) The utter simplicity of the surgery itself makes it possible for anyone to buy a punch and start transplanting hair. Usually, if the procedure is performed properly, hair will grow; but without proper patient selection and careful planning and design for each patient, success will be limited.

For these reasons it is important that surgeons consider their own qualifications when evaluating patients for surgery. Beginning surgeons should select only ideal candidates and only those, that if not totally successful, will not be obviously disfigured.

In conclusion, the combination of careful patient selection, careful planning and design of the procedure, consideration of the eventual amount of hair loss and consideration of one's own qualifications, will result in the cosmetic improvement of most subjects who undergo hair transplant surgery. ☐

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"When We Settle Down, We Grow Pale and Die": Health in Western Indian Territory

VIRGINIA E. ALLEN, PhD

The relocation, defeat and loss of freedom of the Plains Indians produced grief, disease, shock and population loss.

I have heard that you intend to settle us on a reservation near the mountains. I don't want to settle. I love to roam over the prairies. There I feel free and happy, but when we settle down we grow pale and die.¹

These words of Satanta, Kiowa chief—"Orator of the Plains"—expressed the emotions of the Southern Plains Indians assembled at the Medicine Lodge Council in 1867. The Council was the result of increasing hostility between Indians and whites during the 1860's and renewed white demand for more

Indian lands. By the terms of the Medicine Lodge Treaty, the Kiowas and Comanches were to live on three million acres in southwestern Indian Territory, and the Cheyennes and Arapahoes in a comparable area just to the north of them. The Treaty obligated the federal government to furnish each reservation with administrative personnel, teachers, and an agency physician. To compensate for the abrogation of previous treaty commitments, the government agreed to expend \$20,000 annually for the benefit of the tribes on each reservation. The annuities were to be issued in the autumn, in order to insure the Indians adequate provisions for the winter. All parties to the contract agreed to cease hostilities. However, the years immediately following the Medicine Lodge agreements were filled with warfare, confusion, despair, and suffering.

Western Indian Territory contained vast stretches of land with low mountains, rolling hills, and meandering streams. Here, the Indians were to leave their own "buffalo road" forever and begin their tragic journey down the "white man's road." Although the horizon stretched unbroken by fences or visible boundaries, the restriction of these nomads to reservations, under military surveillance, was equivalent to captivity. Confinement of the Plains Indians to reservations necessitated far-reaching changes in all aspects of their way of life which had a significant impact on their health.

Presented at the Missouri Valley History Conference, March 12, 1976, Omaha, Nebraska. Some of this material also appears in: Virginia Allen, "The White Man's Road: The Physical and Psychological Impact of Relocation on the Southern Plains Indians," *Journal of the History of Medicine and Allied Sciences*, Vol. XXX, no. 2 (April, 1975), pp. 148-63. Research for this paper was supported by the NIH Grant LM01396 from the National Library of Medicine and by the Oklahoma Medical Research Foundation.

The federal government had decided that it would be easier to civilize the Indians than to continue fighting them and sought to solve the problem of "civilizing" by making them farmers. These restless and resentful hunters were expected to begin a farming life at once. Differences of opinion arose among tribal leaders as to what constituted the best course for survival of their people. Some of the chiefs, like Little Raven of the Arapahoes, desired to cooperate and settle down. However, young warrior elements of the tribes, like the Cheyenne Dog Soldiers, wanted to renew hostilities. Sporadic warfare, which broke out in the early 1870's, continued until the summer of 1875 when all the warriors in western Indian Territory finally surrendered. As the hostile bands were subdued, the army appropriated the Indian ponies and livestock, disarmed the warriors, and arrested the warring chiefs who were sent in irons to a Florida prison. Leaderless and afoot, these demoralized and disillusioned people tried to adjust to the dull routine of reservation life.

Indian Bureau officials did not understand the social impact of settling the Indians on individual farms. The Plains tribes had lived in bands and camped with their tipis side by side. They feasted, worshipped, worked, hunted, and fought together. One Arapahoe expressed their feelings this way:

Neither we nor our dogs nor our ponies understood this new way of the white people. To us it seemed unsociable and lonely, and not the way people were meant to live.²

Added to the trauma of sudden change was failure of the government to provide adequately the necessities of life. Insufficient food was a chronic reservation problem, especially the first decade, even though the Indian Commissioner expressed the sentiment that it was cheaper to feed than fight the Indians. Their situation often became grave as the buffalo diminished in number and malnutrition and hunger increased. There were no treaty provisions obliging Congress to provide full rations, therefore the adequacy or inadequacy of Indian rations depended upon the humor of Congress each year. The buffalo had been not only their chief food but also had provided a source of income from the sale of hides which had enabled them to purchase additional food from local

traders. The Indian Bureau had intended that as these nomadic plainsmen became sedentary farmers, the government would supply less and less food. They failed to consider the difficulties encountered in farming on the plains by even experienced farmers and actually penalized the inexperienced Indian farmers by decreasing their rations.

The Treaty did specify that the government was to provide certain clothing and other goods. The record of federal fulfillment of the clothing and annuity obligations is almost as bleak as that of providing rations. From the beginning, the issuance of rations and annuities was unpredictable, with goods frequently late or of inferior quality, or both. October 15th was the treaty date for distribution, but they were often issued three to six months later, leaving the Indians poorly clothed and housed during the worst months.³ They clung to their traditional tipis which to them were things of beauty and familiarity. After the buffalo became unavailable for making tipi coverings the Indians frequently endured great suffering, because they were forced to rely on government-issue cotton ducking. The best ducking was not comparable with buffalo hide for protection from wind, rain, and snow. The maximum wear of a good cotton tipi was approximately a year and if the annuities arrived late or the cotton issued was rotten, as happened too frequently, the suffering from exposure was great.

Of the many woes brought by white men to the American aboriginals, infectious diseases proved to be the most deadly. Living on an isolated, uncrowded land for thousands of years, the Indians had no experience with communicable diseases common to Europeans and Africans, and therefore had no natural immunity. Official government health reports were not kept until 1874, but other accounts and reports reveal many of the early health problems. Annual reports to the Indian Commissioner and eyewitness accounts of agents and others mention health problems prominently. Monthly sanitary reports, which, began in 1874 and correspondence of agency physicians and others give a fairly complete picture of Indian health.

In 1872, approximately 700,000 acres of the Cheyenne-Arapahoe reservation was reassigned to several small, more agricultural tribes, principally the Wichitas and Caddoes. These tribes began reservation life in a most debilitated condition, lacking such basic neces-

sities as food and clothing. They had been destitute in Kansas when they began the arduous trip soon after the Civil War to their farm homes near the Wichita Mountains. The fact that they had no binding treaty with the federal government added to their insecurity and distress. The 1872 agreement was never ratified by Congress and in 1878, their agency was consolidated with the Kiowa-Comanche Agency. Encamped during the return journey, they were panicked by a sudden epidemic of what appeared to be cholera. With many dead and others dying, most of those remaining well used their energy caring for the ill rather than burying the dead, while a few merely fled. The creek which flowed by the campsite became known as Skeleton Creek.⁴ After arriving at a temporary agency they became ill again, losing sixteen more tribesmen. A physician called by the agent made the vague diagnosis of cholera morbus in an aggravated form. He blamed the illness on their eating unripe fruits and vegetables, however, it is unlikely that this practice would have resulted in such high mortality. Conditions improved little when the Wichita agent reported in 1871 that the rains of the previous autumn had made streams unusually high, resulting in water standing in old bayous and bottom-land basins. A dry summer followed, leaving stagnant pools which caused more illness.⁵ There are no statistics of the total number they lost or the extent of their physical suffering during the first few years, but their population was decreased and their health impaired.

During the first few years in Indian Territory, the Indian warriors with their women and children were scattered over the plains confused, short of food, and destitute. Defeat and insecurity created an emotional climate detrimental to both mental and physical well-being. Since disease is a consequence of the interaction of mind, body, and environment, many factors play a role in determining the health of people including diet, clothing, shelter, social customs, medical beliefs, and rapid change. In addition, the general health of a group is determined to a great extent by geography and economics. The Plains Indians were subjected to traumatic social change, displaced geographically, and their economy destroyed; inevitably, their health was impaired.

Immediately following the Treaty, cholera was reported "raging" among the Cheyennes and Arapahoes along with "all manner of

diseases."⁶ By 1870, the agent reported that many sick and infirm needed some arrangements made for their care and that many children had died from whooping cough.

The Kiowa-Comanche Agent Lawrie Tatum wrote that many Indians on his reservation were sick with bilious complaints in the spring of 1870. He attributed the illness to two causes: a wet season which, "in new countries is apt to cause malaria and bilious complaints," and eating green corn and melons and other vegetables new to them.⁷ The Indians blamed the location for the sickness, and most of them moved away from the agency, many not returning until winter. School teacher Josiah Butler's diary of that year reveals that all his family had trouble with malaria, chills, and fever, all autumn and on into the winter. "My! the quinine we take!" he remarked.⁸

Doctor William Nicholson on a tour of Indian Territory in 1870 reported that the Indians suffered from intermittent fevers when camped near the agency, but were healthier when on the hunt.⁹ Once, although game was scarce, the agent sent them on a hunt to improve their health. Health conditions remained much the same during the first half of the 1870's. Agent John Miles at the Cheyenne-Arapahoe reservation wrote the Indian Commissioner that many Indians and employees were ill with malaria and intestinal disorders and requested authorization to build a hospital.¹⁰

The so-called intermittent fevers — malaria — were responsible for the most dramatic accounts of illness at the reservations. Malaria, which probably originated in Africa, is one of the most widespread of all diseases, even in the 1970's. It is easier to diagnose from documents than other diseases because of the periodicity of fever attacks and the response to quinine. Malaria itself rarely kills, but frequent attacks result in increasing anemia and are physically debilitating, making the victim susceptible to

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other health problems. There were various other fevers described as typho-malarial, bilious remittent, and typhoid fever. All were common in the river valleys of the United States, especially in the south and in newly settled areas. Many of the initial symptoms were similar and stagnant or polluted water was a factor in their propagation, hence the confusion. The two main forms of aestivo-autumnal fevers resulted from either malaria or typhoid. In many cases it would have been difficult for the agency physician to distinguish between the two without the benefit of laboratory facilities, since frequently he was unable to observe the patients after the initial stages. They often came in for one course of treatment and then returned to their camps.

The worst months for seasonal fevers were August, September, and October, although sometimes they continued into November and December, depending on the weather. Physicians on both reservations recorded unusually high case loads during those months in the late 1870's and early 1880's, with a high mortality rate.¹¹ Unfortunately, medical stores including quinine failed to arrive in August of 1876 and the Cheyenne-Arapahoe agency doctor sent away empty-handed over a thousand applicants for medicine.¹² The successful treatment of this disease with quinine was the clearest evidence of the efficacy of the white physician's medicine. One doctor reported, "In this one class of disease we have the native doctor vanquished from the field."¹³ Another agency doctor speculated that in the majority of camps and lodges quinia could be found at all times laid away and kept in readiness for an attack of fever.¹⁴

The severity of the health problems was dramatically illustrated, in September, 1878, by the flight of Dull Knife and his band of Northern Cheyennes toward their old homeland in the north. During the previous winter there had been forty-one known deaths among the Cheyennes. The great mortality in August with the closing of the dispensary because of exhausted medical stores was the catalyst which led to their decision. They preferred possible death by bullet to death from disease. Agent Miles reported that they were heard to say as they headed north:

We are sickly and dying here, and no one will speak our names when we are

gone. We will go north at all hazards, and if we die in battle our names will be remembered and cherished by all our people.¹⁵

Malaria and typhoid continued to be health problems into the 1890's. The troops stationed at Fort Reno across the river from the Cheyenne-Arapahoe Agency suffered comparable health problems. A high incidence of malaria corresponded with that of the Indians. Medical records of the fort show a variety of illnesses similar to those at the agency including: other so-called fevers, diarrhea, chronic rheumatism, headaches, dysentery, and scurvy.¹⁶ Unfortunately, the fort sewage which entered the river above the point where agency water was pumped contributed to the illnesses of the Indians and others at the Agency. Protests of the agent and the physician had little impact upon military bureaucracy.

The agency physicians treated a variety of illnesses and complaints. In the early 1880's there was a brief decline in malaria but an increase in diarrhea and dysentery with deaths per agency varying from 4-to-16 per month. There was also a small outbreak of chicken pox and increased respiratory disorders. At various times, there were epidemics of influenza, whooping cough, and mumps. All were serious for the poorly housed, non-immune Indians. Rheumatism and other chronic problems associated with exposed living conditions were always present, as were a variety of respiratory ailments. Some months the sanitary records showed fairly large numbers of cases listed under vague categories such as headache, constipation, colic, dyspepsia, and catarrh. One physician commented that many ailments were trivial, though they thought they were sick and were greatly offended if not prescribed for — just like patients of all races today.¹⁷ Other annoying health problems included the itch, head lice, tape worms, pinworms, and other parasites. On the whole, physicians reported very few cases due to accidental injuries, such as wounds or fractured bones.

Periodic smallpox scares had caused the physicians to vaccinate the western Indians and they were spared serious smallpox epidemics during the reservation years. They did experience tragic measles epidemics in 1877 and in 1892. In the 1877 epidemic, the head of almost every lodge of the Cheyenne and Arapahoe tribes wore a badge of mourn-

ing. Out of 113 children in one school, 74 were down with measles at one time.¹⁸ The fact that none of the children cared for at the agency schools died, while 220 children died in the camps, greatly impressed the Indians.¹⁹ The epidemic of 1892 was accompanied by a high incidence of malaria and whooping cough. The three illnesses resulted in a high death rate.

Eye diseases increased on both reservations from the 1880's onward. Most of the eye problems were listed under the general term, conjunctivitis. The blinding eye disease, trachoma, which became a significant problem among Oklahoma Indians after 1900 was not diagnosed in the earlier years. Many eye irritations resulted from pollens and prairie dust, tipi smoke, face paint, and minor infections such as "pink eye." Granulated lids which accompany trachoma were first mentioned in 1889, and the disease first diagnosed in 1894.²⁰

By the 1880's agency physicians began to comment on the increasing number of cases of scrofula, consumption, and syphilis. By March, 1879, one-half of the deaths at the Kiowa-Comanche agency were due to consumption.²¹ The children sent to various Indian schools in the "States" were especially susceptible to tuberculosis. They often contracted it at school and had to be returned home ill. Indian parents were greatly disturbed when they heard reports of a child being sick and wanted them sent home immediately. The possibility of children becoming ill at school contributed to the parents' reluctance to let them go.

Although syphilis was on the increase, there was a tendency on the part of the agents and others to emphasize venereal disease as the root of most health problems. Skin lesions which were the result of scrofula, impetigo, or other skin infections could have been easily mistaken for syphilitic lesions. However, when syphilis was positively diagnosed by the physician, he often had difficulty convincing the camp Indians to refrain from sexual contact or to return for treatment. As association with whites increased, so did the incidence of tubercular and venereal diseases. Alcoholism also increased proportionately.

Since the acceptance of the germ theory it is common to think of disease in terms of specific pathogenic agents. However, clinical disease does not result necessarily from a single specific agent, such as a bacterium or virus, but is a consequence of many factors. Potentially harmful elements are always present; for

example, some viruses live harmlessly in the body, but cause disease when the body defenses wear down. Sudden and violent alterations in environment engender stress. The body reacts defensively not only to damaging microbial agents, but to threats and symbols of danger.²² Excessive stimuli may cause reactions which stress the body beyond its limits, then, adaptations which ordinarily serve to protect may damage.²³ Studies of the changes in the mucous membranes of the respiratory tract show that this system becomes more susceptible to infections under circumstances which are interpreted as threatening.²⁴ Thus, alterations in the character of mucosal secretions permit tubercular bacilli to survive and multiply when they otherwise would not. Other serious, life-endangering illnesses often develop under stress during only minor functional disorders. Personal health and satisfaction depend on successful adjustments to life situations. The ability of the Plains Indians to adapt was overloaded by the demand of an immediate change in the structure of their society.

Psychological functions are also impaired by the stress accompanying rapid change. When an individual fails to resolve his conflict, or when his fight to adapt ends in defeat, he often becomes apathetic and withdrawn. A person, grappling with unfamiliar and unpredictable events in an environment which denies gratification of important psychological and physical needs often becomes anxious, confused, and unable to act. The Plains Indians exhibited these responses to the stress engendered by relocation and reservation life. The stresses of defeat and of acculturation contributed to the poor health and apathy on the reservations. The despondent plainsmen soon became victims of serious illnesses. In the succeeding years, the effects of stress continued to undermine their physical and psychological health. The Indians understood the possible implications of white demands far better than their white brothers. As one chief expressed it, "we can learn to take the white man's 'medicine' a little at a time, but I cannot swallow it all at once."²⁵

The "Trail of Tears" endured by the Cherokees and Choctaws enroute to Indian Territory captured the attention and sympathy of Americans in the twentieth century, but the extent of the trauma experienced by the Plains Indians and its impact on their lives and health has received little recognition. Al-

though the Plains tribes were not forced to leave loved homes and march long distances, their defeat, relocation, and loss of freedom produced comparable grief, disease, shock, and population loss. For a time the words of Satanta, "We grow pale and die," seemed prophetic. □

FOOTNOTES

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4. Josiah Butler, "Pioneer School Teaching at the Kiowa-Comanche Agency School 1870-73," *The Chronicles of Oklahoma*, Vol. 6, p. 489.
5. Commissioner of Indian Affairs, *Annual Report* (Washington, DC), 1871, p. 479.
6. Thomas Murphy to Secretary of Interior, 14 February 1868, letters received by the Bureau of Indian Affairs, 1824-81, Record Group 75, Microcopy 234, roll 880, no. 44, National Archives, Washington, DC.
7. Commissioner of Indian Affairs, *Annual Report* (Washington, DC), 1870, pp. 260-61.
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9. William Nicholson, "A Tour of Indian Agencies in Kansas and the Indian Territory in 1870," *The Kansas Historical Quarterly*, Vol. 3, p. 348.
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- P.O. Box 26901, Oklahoma City, Oklahoma 73190.

Oklahoma Academy of Family Physicians "SPORTS MEDICINE SYMPOSIUM"

July 30-31, 1977

Western Hills Lodge • Wagoner, Oklahoma

PROGRAM SCHEDULE

SATURDAY, JULY 30TH — A.M. SESSION — 8:00 — 12:00

Pre-participation Physical Examination

Child and Adolescent
Adult

Nutrition and the Athlete
Conditioning

Child and Adolescent
Adult

Equipment for Contact Sports
Team Physician — Coach Relationship
as Seen by the Coach

Eugene Luckstead, MD
Thomas Coniglione, MD
Ronald Ratliff

Eugene Luckstead, MD
Thomas Coniglione, MD
Donald Cooper, MD
Henry Manning

SATURDAY, JULY 30th—P.M. SESSION — 1:30 — 3:00

On the Field Evaluation of Athletic Injuries
Treatment of Partial Sprains and Strains
Taping, Demonstration, and Examination

Donald Cooper, MD
Jeff Fair

SUNDAY, JULY 31ST — A.M. SESSION — 8:00 — 12:00

Evaluation of Knee, Ankle and Shoulder Injuries
Common Hand Injuries in Sports:
Their Treatment and Rehabilitation
Rehabilitation of Knee and Shoulder Injury

Don H. O'Donoghue, MD; William Grana, MD
Carlos Garcia-Moral, MD
Jeff Fair

All Oklahoma Medical Doctors, Athletic Directors, and Coaches of public schools, colleges and universities are cordially invited and encouraged to attend. **BRING YOUR FAMILIES** for a WEEKEND of REST, RELAXATION, and VALUABLE INFORMATION . . .

REGISTRATION FEE \$10.00 — 10 Prescribed Hours

RESERVATIONS

For Lodging Accommodations: Please make your room reservations direct with Western Hills Lodge (The entire Lodge has been reserved for this meeting).

Home Health Care Program Chronic Disease Division

The Oklahoma State Department of Health is the agency designated by the Governor to develop Home Health Care Programs throughout the State ten years ago. Today forty-nine counties have this service available as one of their on-going public health nursing services. Health departments were ideally suited for this program as public health nurses have traditionally participated in or taught individuals and/or families to care for the sick in the home.

Home Health Care is a term that is used to describe the delivery of skilled nursing care and one or more other services such as physical therapy, speech therapy, occupational therapy, home health aide or medical social services. This care is under the direction of the individual's physician in their place of residence. These services can be used by all age groups for the care of acute or chronic illnesses, on an intermittent basis for a few hours each visit. It does not take the place of hospitalization or nursing home care, but it does provide the physician and individual with an alternative to institutionalization. Home Health Care has the goal of preventing disease; promoting,



News From The Oklahoma State Department of Health

maintaining or restoring health; or minimizing the effects of illness and disability.

Last year 1,167 Oklahomans received Home Health Care services, such as, teaching nursing care to the patient by the registered nurse; dressings and care of wounds; catheter changes and irrigations; ostomy care; giving and teaching injections; therapeutic exercises and evaluations by a registered speech therapist; location of resources and referral by a medical social worker; personal services by the home health aide; monitoring of medications, blood pressure, pulse and rehabilitative nursing by the registered nurse.

Directories listing all the Home Health Care Agencies both public and private, certified for Medicare in Oklahoma, are available, free of charge as a public service from the Chronic Disease Division, Home Health Care Program, State Department of Health. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR APRIL, 1977

DISEASE	April 1977	April 1976	March 1977	Total To Date 1977	1976
Amebiasis	2	—	4	6	2
Brucellosis	—	—	—	—	—
Chickenpox	218	262	169	732	1157
Encephalitis, Infectious	—	1	3	5	5
Gonorrhea (Use Form ODH-228)	1014	997	1146	4083	4319
Hepatitis, A, B, Unspecified	97	95	66	290	631
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	3	2	1	5	17
Meningitis, Aseptic	—	3	6	10	8
Mumps	80	92	74	353	476
Rabies in Animals	38	17	47	123	41
Rheumatic Fever	—	1	—	1	4
Rocky Mountain Spotted Fever	9	3	—	10	3
Rubella	6	9	9	23	40
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	7	17	16	46	213
Salmonellosis	12	9	1	22	45
Shigellosis	7	34	1	14	100
Syphilis, Infectious (Use Form ODH-228)	6	4	7	26	39
Tetanus	—	—	—	—	—
Tuberculosis, New Active	29	37	32	106	121
Tularemia	1	—	—	1	—
Typhoid Fever	—	—	—	—	—
Whooping Cough	—	—	1	2	1

Plan Apparent Prelude to NHI

Carter Administration Announces Cost Containment Act

The Congress has received its first major health bill from the Carter Administration — a massive and complicated program for limiting hospital revenues to a nine or ten per cent rise annually. Income from all inpatients, private as well as federal beneficiaries, would be affected.

Under the Carter plan, hospitals exceeding the allowable increase could be socked with a penalty tax amounting to 150 per cent of the "overcharges." Such offenders also would have to reduce charges the following year.

Physicians' offices were not affected by the proposed legislation, although Health, Education and Welfare Secretary Joseph Califano, Jr. has indicated this is under study.

The hospital plan received the fanfare of a White House send-off, with a statement by President Carter and White House briefings of affected groups and of reporters. Contrary to some expectations, Carter did not use the plan as the keystone of a major health message to Congress, though he mentioned national health insurance. Many expect he will tie the containment act and NHI together later.

"Unrestrained health costs also restrict our ability to plan necessary improvements in our health care system," Carter said. "I am determined, for example, to phase in a workable program of national health insurance. But with current inflation, the cost of any national health insurance program the Administration and the Congress will develop will double in just five years."

Congressional hearings are expected to open in a few weeks on the hospital program, and most experts feel there's no way the proposal will get through Congress unscathed. The lawmakers have been pushing to brake the costs of Medicare and Medicaid, but apparently a cost-control program involving an entire private industry is a different matter. There is

almost no sentiment in Congress for a revival of wage and price controls for the economy as a whole.

At the insistence of organized labor, the Carter proposal contains an exemption for hospital wage increases which by itself would appear to destroy the intent of the nine per cent restraint. Any hospital could adjust upward its permissible revenue by the amount of any wage increase, thus destroying the program's effectiveness.

Inpatient revenues of the 6,000 acute-care hospitals in this country are covered in the proposal. Brand new hospitals, federal hospitals, and hospitals controlled by Health Maintenance Organizations (HMO's) are not.

The proposal would also impose a limit on new capital expenditures, fixing a national level below that of recent years and allocating new capital spending among the states by formula. With the assistance of local planning agencies, each state would determine how the hospitals can make capital expenditures.

States which operate cost containment programs which are capable of meeting the federal criteria could continue their own regulatory approaches.

President Carter said his program will save about two billion dollars in fiscal year 1978 — starting next October. The Administration claims this would work out to over \$650 million in the federal budget, over \$300 million in state and local budgets, and almost \$900 million in private health insurance and payments by individuals. In fiscal year 1980, total savings were estimated at \$5.5 billion.

The American Hospital Association charged that the control measure "would severely jeopardize the provision of hospital care to the American public." Hospitals and physicians will unite in opposing it, the AHA said.

"This proposal would not only prevent hospitals from increasing services to patients, it

would require some to cut back existing services," said J. Alexander McMahon, President of the AHA, at a Washington, DC news conference.

"The real victims would be the sick and injured, and for their sake, hospitals across the country will unite to oppose this bill."

McMahon said the Administration's proposal is "extremely complicated and would require a huge bureaucracy to enforce it, further adding to hospital costs." He predicted flatly that Congress would reject the plan.

Walter J. McNerney, President of the Blue Cross Association, said a program to limit the rate of increase in revenues on any segment of the health care industry, whether hospitals or other providers, ought to be designed not only to moderate cost increases but, equally important, to provide incentives for more efficiency within the established revenue restrictions." He urged greater flexibility.

Michael Bromberg, Director of the Federation of American Hospitals (FAH) said the proposal "is unfair and arbitrary and it will not work. Not only is it impossible to inhibit inflation by law, but there is a real danger that by legislating a ceiling on hospital costs, the Administration would be directing hospitals to

cut back on the quality of health care delivery," he said.

A related story regarding the Carter Cost Containment Act and an American Hospital Association statement is featured below.

As Carter described his plan, "This legislation is not a wage-price control program. It places no restrictions on the hospital's ability to determine its charges for any particular service. It places no limit on the size of any wage demand or settlement. The program establishes an overall limit on the rate of increase in reimbursements, permitting doctors and hospital administrators to allocate their own resources efficiently, responding to local needs and individual circumstances."

The cost containment system is "intended to flow directly into a long-term prospective reimbursement system," said Carter. Congress and the Administration are already at work on this long-range system, he added.

Under the bill, the basic limit on increases in total inpatient-care revenues would be set by a formula reflecting general price trends in the economy as a whole, plus an additional amount to accommodate some increase in intensity of patient services. □

Hospital Association Opposes Carter Plan

A controversial hospital cost-containment act, which is designed to "limit the growth of the major component of health cost increases — rising hospital expenditures," was sent to Congress in April by President Carter. This program, which the President claims would save approximately two billion dollars next fiscal year, would do the following;

(a) Limit inpatient reimbursements of acute care hospitals (except new hospitals, federal hospitals and hospitals run by health maintenance organizations).

(b) Provide an automatic formula to adjust a nine per cent limit for moderate patient-load changes. The formula is designed to discourage unnecessary hospitalizations.

(c) Include an adjustment for wage increases to non-supervisory workers.

(d) Allow states which operate cost-containment programs and which can meet the

federal programs criteria to continue their own regulatory programs.

(e) Include an exceptions procedure for hospitals that might undergo extraordinary patient-load changes or other unusual contingencies.

Even before President Carter had revealed this plan which he says will result in savings exceeding 5.5 billion dollars by 1980, American Hospital Association president, John Alexander McMahon, had commented, "I'm certain that any across-the-board ceiling will bring the total opposition of the hospital field, but the real losers will be the sick and injured whose services would not be increased, and in many cases even reduced." AMA Executive Vice-President James H. Sammons, MD, also expressed disapproval of the measure.

"The medical profession must be concerned about the impact that this concentration on

expenditures will have on the quality and availability of hospital care for the American people. If expenses go up 15 per cent and expenditures are limited to a 9 per cent increase, you obviously have to cut somewhere . . . that may mean a curtailment of the services which are most costly — meaning a community hospital may have to refuse patients who need the more expensive technologies and equipment, or else cut corners on quality of equipment and staff.” Sammons said the medical profession “is concerned about the cost of health care, but we cannot be concerned only with the cost in terms of dollars. We must also consider whether a single ‘lid’ on spending means we can buy only second-rate care, and whether some care may simply become unavailable for many people.”

As expected, a hospital association task force, which included Cleveland Rodgers, Executive Director of the Oklahoma Hospital Association, has drafted a statement concerning the containment act which President Carter says is not a form of wage and price control. Below is the hospital association’s position paper on this proposal, HR 6575. Even while the hospital association was drafting its response to Carter’s containment act, however, the President made it clear that he would also pursue other avenues of holding down health care costs during his administration. The President said he was committed to strengthening competition in the health profession, and that he plans to encourage HMO’s and other incentive arrangements. The President said his new program of hospital cost containments is transitional and that it will be replaced by a “long-term perspective reimbursement system” which is already in the planning stages.

Position of the American Hospital Association

The American Hospital Association strongly opposes enactment of the Administration’s Hospital Cost Containment Bill (HR 6575/S. 1391), which we believe would severely jeopardize the provision of high-quality hospital care to the American public.

The proposal, as introduced, is seriously flawed in many respects and, in some, is an inappropriate response to the issue of dealing with hospital costs. While we acknowledge that the current rate of increase in hospital

costs cannot be sustained indefinitely, we do not believe that the Administration’s proposal will deal with the factors that are responsible for rising hospital expenditures.

Our analysis of hospital costs discloses that inflation in the goods and services that hospitals buy has been particularly severe; our current estimates are that this rate of increase is about 10 percent. The development and application of new medical technology and the more intensive use of such advances contributes to an additional 5 to 6 percent increase in expenditures. Moreover, the costs of compliance with many governmental and voluntary regulatory requirements are increasing dramatically.

Other important factors impacting hospital costs include the expansion of health insurance coverage, both private and governmental, an increase in the number of physicians and other allied health professionals, and changes in the characteristics of the population, particularly the increasing numbers of persons over 65, all of which translate into a demand for more health care services. Further, an overall rise in the public’s expectations for the efficacy of medical care and convenient access to that care have significantly increased the demand for hospital services.

In general, we are opposed to HR 6575, because it does not protect hospitals from increasing costs induced by general inflation and changes in the volume and nature of services required by patients. The bill would establish a form of price controls on only one segment of the economy.

We want to bring to your attention a number of specific deficiencies in this legislation:

1. The application of the revenue limit would be retroactive in hospitals with fiscal years ending at times other than September 30. Further, such hospitals at the beginning of their fiscal years would not know the revenue limit to which they would be subject for a full year.
2. The formula for calculating the inpatient revenue limit would have the effect of limiting the rate of growth of health expenditures to less than the rate of increase of the gross national product (GNP).
3. The impact of the limit would be most severe in institutions with the most efficient operations.

4. Third-party payers would have to rely on hospitals to supply them, on a continuing basis, data to determine both the level and overall limits of their payment for inpatient services.

5. The GNP deflator is not an appropriate measure of increases in the hospital market basket.

6. The exceptions process in the bill would require that no exceptions request could be considered unless a hospital's ratio of current assets to current liabilities placed it in the bottom 25 percent of hospitals covered by the program. Further, exceptions would be considered only in instances of exceptional change in patient load, major increases in capacity or types of services, or major renovation or replacement of physical plant.

7. The conditions established by approval of capital programs would not include automatic recognition of the costs of such programs as an adjustment to revenue limitations. The hospital could only have such costs recognized by meeting the exceptions criteria in full, as described above.

8. Application of the inpatient revenue limit in hospitals that subsidize outpatient services with inpatient revenues would limit the ability of such hospitals to sustain outpatient services.

9. The provision to pass-through wages of non-supervisory personnel could result in compression of a hospital's wage structure.

In summary, the AHA strongly believes the Administration's bill is inappropriate in concept and would be intolerable in its implementation. We will oppose the measure in its entirety, and we seek your active participation and support.

As an initial step, hospitals must communicate forcefully and directly their concerns about this bill to their representatives in Congress. It is essential that each institution in addressing this proposal cites some of its specific problems and uses local examples in an assessment of the proposal's likely impact on hospitals and patients.

As this legislative proposal is considered in subcommittee, in full committee, and on the floor of Congress, additional actions will undoubtedly have to be taken by the AHA, the allied hospital associations, and individual hospitals in opposing its enactment. □

American Health Care Spending Lags Behind Non-essential Costs

Americans spend a lot of money on health care, but they spend a lot more on some other things — recreation, alcohol, tobacco and personal grooming for instance.

A communication in the May 23rd *Journal of the American Medical Association* from N. R. Bothereau, MD, of Lafayette, California, points to the latest figures from the US-Department of Commerce on how Americans spent money in 1975. These are the figures:

Recreation, \$66 billion; alcohol, \$24.68 billion; tobacco, \$14.8 billion, and personal grooming, \$14.27 billion, for a total in these four areas of \$119.75 billion.

Hospitals, \$34.67 billion; physicians services, \$22.11 billion; all other health care, \$19.83 billion, and drugs, \$9.82 billion, for a total on health care of \$86.43 billion. □

Oklahoma City Doctor Named Heart Association President

Charles N. Atkins, MD, an Oklahoma City physician, assumed Presidency of the Oklahoma Affiliate of the American Heart Association at its 1977 annual meeting in Oklahoma City.

Doctor Atkins has served on the American Heart Association Affiliate's board of directors for eight years, holding virtually every office, and is currently serving nationally as a member of the American Heart Association's Committee on Minority Involvement.

Paul Houk, MD, Oklahoma City cardiologist, will serve as President-Elect for the 1977-78 term; Joanne I. Moore, PhD, head of pharmacology at the OU Health Sciences Center, first Vice-President; Jim Loftis, Oklahoma City architect, Secretary; and Andy Campbell, Oklahoma City banker, Treasurer.

New members to the board of directors will be: Don Cunningham, Tulsa; Richard C. Slagle, MD, Tulsa; Louis Stackler, Enid; Mrs. Marie Stamper, Hugo; Bernard Keller, PhD, Weatherford; and Jewell Shelton, Oklahoma City.

Advisory board members, in addition to past presidents, will be: L. L. Conrad, MD, Tulsa; Mrs. C. E. Moody, Oklahoma City; and Alfred C. Gaylor of Oklahoma City. □

AMA Protest Generates HEW Apology

Health, Education and Welfare Secretary Joseph Califano, Jr., has formally apologized to the American Medical Association and all affected physicians for the error-ridden report it released last month on Medicare reimbursements. The report included the names of 409 physicians, 1,752 medical groups and 58 laboratories whom HEW says received over \$100,000 in Medicare. A quick survey by the AMA and affected county and state medical societies showed, however, that the HEW/Social Security Administration list had an error rate of approximately 66 per cent. This led to widespread criticism of the list, HEW and the SSA.

As a result of the many errors contained in the reimbursement list, in many cases the press joined in with organized medicine in demanding an apology from those responsible for the work and a plan for cleaning up the errors. The *Washington Star* described the list as, "A sloppy piece of work," and the *Tulsa World* described Secretary Califano as coming up with egg on his face again. As a result of the widespread criticism, the HEW issued the following letter to AMA Executive Vice-President James H. Sammons, MD. If there was ever any doubt about Secretary Califano's and the administration's plan for National Health Insurance, the last paragraph of Califano's letter should answer those questions.

James H. Sammons, MD
Executive Vice President
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

Dear Dr. Sammons:

This is in response to your letter of April 6 concerning errors in the Social Security Administration's March 12 listing of physicians who received public funds in excess of \$100,000 from the Medicare program in calendar 1975.

On behalf of the Department of Health,

Education, and Welfare and the Social Security Administration, let me express our deep regret at the significant number of errors contained in the March 12 listing. As I personally indicated to you at our meeting, I am deeply distressed at the number of errors, and I regret any embarrassment that may have been caused to any of your individual members.

I have asked Robert Derzon, the Administrator-Designate of the new Health Care Financing Administration, to review the entire matter with the view toward taking whatever actions are necessary to prevent a situation like this from arising again. He will discuss these corrective actions with you. In this connection, the results of your survey of 208 of the physicians listed as solo practitioners have been particularly helpful. He will verify and correct our original listing and put out a new one for 1975.

I am committed to making more information public about the costs of health in our nation. In the future, we will make significantly more information available to the public. There will be no arbitrary cut-off on care at \$100,000 for the fees of doctors, and information about other health care providers will also be available to the public. We will do everything in our power in the future to make certain that, when we publish the amounts of money that institutions and individuals receive from the Medicare program, they have been carefully checked and are as accurate as possible, given the enormous scope of the program.

It is imperative that the American public have all the facts about the costs, utilization, and practices of health care providers as they consider the method by which to provide a national health insurance program for all citizens. Our responsibility is to make as much information public as we can, without invading any individual's privacy, and to make certain that information is accurate. With respect to the 1975 list, the Department did not adequately fulfill its responsibility. I intend to see that it does in the future.

Sincerely,

Joseph A. Califano, Jr.

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DEATHS

LEONARD J. ELLIS, JR., MD
1917-1977

Leonard J. Ellis, Jr., MD, 59, Oklahoma City general practitioner, died May 17th, 1977. A native of El Reno, Doctor Ellis was graduated from the University of Oklahoma College of Medicine in 1942. Following service with the US Army Medical Corps, he entered private practice in Oklahoma City in 1947, a practice which he maintained until his retirement last year.

L. J. STARRY, MD
1894-1977

L. J. Starry, MD, 84, Oklahoma City surgeon, died May 13th, 1977. Doctor Starry was a native of Dodgeville, Wisconsin, and received his medical degree from Washington University School of Medicine in 1919. He served his internship at St. Anthony Hospital in Oklahoma City, where he became chief of staff in 1949. He was Professor

of Surgery at the University of Oklahoma Health Sciences Center from 1924 to 1948, when he became Chairman of the Surgical Department.

Doctor Starry was a Fellow of the American College of Surgeons and a member of the International College of Surgeons and the Oklahoma City Academy of Medicine. In 1974, Doctor Starry was honored with the presentation of a Life Membership by the Oklahoma State Medical Association.

EARL E. SMITH, JR., MD
1922-1977

Earl E. Smith, Jr., MD, Tulsa Family Physician, died May 15th, 1977. Born in Laura, Illinois, Doctor Smith was graduated from the University of Oklahoma College of Medicine in 1954. He had practiced in Skiatook, Oklahoma, before establishing his practice in Tulsa. He was a member of the American Academy of Family Practitioners. □

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AMA Opposes Increased Powers For Trade Commission

A crucial vote is coming soon on legislation to arm the Federal Trade Commission with strong new powers over business and to expand its authority over non-profit groups including medical associations.

The full House Commerce Committee will be taking up a bill approved recently by the Subcommittee on Consumer Protection. The issue pits consumer interests against business interests with important implications for the medical community.

The FTC has been very active for more than a year in the medical field, taking actions against medical ethical advertising codes, relative value scales, antitrust inquiries about possible resistance to Health Maintenance Organizations (HMO's), and challenging the validity of professional accreditation, among other moves.

To date, however, the agency has not had the power to act against non-profit associations without contending that it is dealing with aspects that are essentially commercial. The bill before the House Commerce Committees would for the first time make non-profit, professional groups a clear responsibility of FTC.

The American Medical Association has urged that non-profit organizations not be placed under FTC control.

Testifying against the legislation (HR 3816), former Federal Communications Commissioner Newton Minow, speaking for the AMA, warned Congress that an FTC battle could devastate non-profit groups.

"A host of diverse organizations having little or no impact on our economy would become subject to the regulatory jurisdiction of the Commission if this provision is adopted," said Minow. "Organizations such as the Boy Scouts of America, the Democratic National Committee, the National Association for the Advancement of Colored People or the United Fund could suddenly find themselves targets of an FTC investigation . . ."

Under HR 3816, the FTC could seize the assets and records of non-profit associations, and levy fines up to \$5,000 per day. The AMA warned that this extreme power was being granted, not to the normal repository of such authority — the judiciary — but rather to a federal agency.

"The cumulative effect of the vast punitive

powers and resources of the FTC would cause all but the most well financed organizations to succumb to FTC pressures and demands," Minow said. "It is difficult enough for large business corporations, which can pass such costs on to their customers, to do battle with the government. But for a not-for-profit charitable, scientific or educational organization, such a battle can be totally devastating. The ends of justice are not served where vindication also means bankruptcy."

Mr. Minow also warned that charities subjected to such treatment would be hardpressed and would be forced to rechannel funds from humanitarian directions to legal protection.

"Every dollar that the American Cancer Society was required to spend on Federal Trade Commission matters would be one less dollar for cancer research."

Focusing on the health sector, the AMA spokesman pointed out that many aspects of the health field today don't correspond to the free competition model, which is the credo of the FTC. For example, certificate of need requirements, placed on health care facilities by the 1974 Health Planning Act, prevent unrestricted and competitive expansion by hospitals.

"The Federal Trade Commission has gone on record as opposing certificate of need laws as anti-competitive," said Minow. "If these health care institutions are brought within the jurisdiction of the Commission, they will thus be faced with conflicting governmental obligations." Similarly, the Maximum Allowable Cost regulations mandated that costs for drugs supplied under Medicare and Medicaid should not be established by free market but rather by a price fixed by the Department of Health, Education and Welfare. "Extension of the FTC's jurisdiction to organizations governed by such conflicting policy and regulatory programs would be inconsistent with previous expressions of Congressional policy in this area," the AMA spokesman claimed.

Minow cautioned that the proposed extension of FTC authority would ultimately work against the public interest.

"Professional societies are continually exhorted to exercise more supervision and regulation over the conduct of their members. The Commission, however, would release these individuals from the ethical structures of professional associations and subject the public to action based upon the unrestrained ingenuity

of individual professionals with only the government able to guard against any excess."

Editor's Note: Shortly before press time the OSMA was informed that two Congressional committees, one in the House and one in the Senate, had acted to kill the proposal which would have placed non-profit organizations under the jurisdiction of the Federal Trade Commission. It was the opinion of the committees that the FTC had not made a sufficient case in favor of expanding its authority. Many non-profit organizations, including the American Medical Association and the American Hospital Association, had strongly protested any expansion of FTC power and authority. □

Assistant HEW Secretary Resigns Disenchanted

The short and unhappy bureaucratic life of Christopher Fordham, MD, has been concluded in a policy dispute with HEW Secretary Joseph Califano, Jr. Doctor Fordham, designated to be the Assistant HEW Secretary for Health, spent several weeks on the job before deciding he had had enough. The physician returned to the University of North Carolina where he heads the medical school.

Doctor Fordham's decision to leave rocked the Washington health establishment and HEW. Fordham concluded the Assistant Secretaryship had been stripped of authority and that others in the department, especially Califano, would be calling the shots on health-policy matters.

The nomination of Doctor Fordham was ready to go to the Senate when he made his announcement in a brief letter to Califano citing "deep personal reasons." He would have been the final member of the HEW top command to be officially seated at the agency.

The delay in filling the spot, and the reason for Doctor Fordham's leaving, is caused by the downgrading of the position as a result of the HEW reorganization in which effective control over Medicare and Quality Assurance has been taken from the health branch of HEW and given to the new Health Care Financing Administration (HCFA). □

Approval of Laetrile Bill Appears Near

Despite the scorn of the Federal Food and Drug Administration, the American Cancer Society, and organized medicine throughout the country, it appears that Oklahoma will soon join the growing list of states where the prescription and administration of Laetrile (amygdalin) has been legalized. At press time the legislatures of five states had already approved this outlawed drug, and only the governor's signature stood between the drug and legalization in a sixth state (Texas). In Oklahoma only consideration by the full Senate and the governor's signature was needed at this writing.

In Oklahoma the pro-Laetrile push is being backed by the local Freedom of Choice Committee, and the bill, HB 1324, is authored by Representatives Tom Stephenson, Mark Hammons and John Monks in the House and by Senators Gideon Tinsley, Ray Giles and John Dahl. It provides that no hospital or related institution may restrict or prohibit the use of amygdalin as long as it is prescribed or administered by a physician and the patient has signed a written informed request form.

Although HB 1324 states that nothing in the act shall be construed as an endorsement of Laetrile, the bill would make possible the use of the drug in this state and would prevent the State Board of Medical Examiners from taking any action against physicians who choose to prescribe Laetrile. Thus far the vast preponderance of medical evidence has shown that Laetrile is ineffective in the treatment, control and prevention of cancer. Pro-Laetrile testimony before the Oklahoma Legislature has been largely emotional and has stressed "that although Laetrile may not be effective, neither is it harmful."

The amended version of the bill, which was approved by the Senate Committee on Public and Mental Health in mid-May, requires a "written informed request" which must be prepared by and obtained from the Oklahoma State Board of Health. Section 6 of the Committee Substitute also provides that "the State Board of Health may regulate the distribution, standardization and sale of amygdalin (Laetrile) for use within the state only to insure that the substance is not adulterated or misbranded . . ."

If the bill gains approval of the full Senate and the governor's signature, it will go into effect on October 1st, 1977. □

Alumni Turn Out in Record Numbers— Present Dean Lynn With Biggest Check Ever



Edward N. Brandt, Jr., MD, (left) class of 1960, accepts his outstanding Alumni Achievement Award from Alumni Association President Clyde Barton, MD.



Curtis Cunningham, MD, (left) class of 1935, accepts his outstanding Alumni Achievement Award from Doctor Barton.

A record-setting 330 alumni and friends of the University of Oklahoma College of Medicine attended the Alumni Association's Annual Dinner/Dance on May 5th. The affair was held at the Sheraton Century-Center Hotel in Oklahoma City in conjunction with Oklahoma Medical Summit '77, which is sponsored by the Oklahoma State Medical Association, the Oklahoma City Clinical Society and the Oklahoma Academy of Family Physicians. The Alumni Association presented Dean Tom Lynn, MD, with a check for \$42,423.72, representing the proceeds of the 1976-77 Med-Fund Drive. Last year's drive gathered \$16,644.

Dean Lynn said he was "most grateful for the support and confidence this check repres-

ents." A total of 410 donors contributed to the drive compared with a total of 124 last year. The money will be used to supply vital matching funds for federal student loans and for other areas of need in the college where tax dollars are not available.

Another highlight of the evening was a presentation of the first annual outstanding alumni achievement awards. This is the highest honor the Alumni Association confers on its members. The recipient in the academic sector was Edward Brandt, Jr., MD, Executive Dean of the University of Texas Medical Branch at Galveston. The winner in the private practice sector was Curtis Cunningham, MD, of Clinton. ☐

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AMA Receives One Million Dollar Postage Bill

The American Medical Association has received a bill from the United States Postal Service of about one million dollars for back postage and is conducting a technical review of the claim. In August, 1975, the AMA informed the postal service that the association had not observed correct practices in completing two forms used in mailing publications at a special second class rate. The bill for back postage is a result of those reporting errors.

The AMA explained that total circulation figures for AMA publications were not in question and were not challenged by the postal service. According to the AMA, circulation figures have been audited by Business Publications Audit since September, 1972. The AMA further explained that the postal rate error was innocent and that there was no intent to deceive or defraud the postal service. AMA leadership explained that the errors had been

brought to the postal services' attention by the AMA and that they have now been corrected. □

AMA Trustee Doctor Nelson Dies

Joe T. Nelson, MD, a member of the American Medical Association's Board of Trustees for the past three years, died of cancer on April 11th.

Doctor Nelson, 53, was a Weatherford, Texas, family physician. Before being elected to the AMA Board of Trustees, he had served as the Texas Medical Association's Delegate to the AMA for the previous five years. He was also a Past-President of the Southern Medical Association and a former Chairman of the Board of the Texas Medical Association.

He was also a member of the University of Texas System Board of Regents and a former member of the board of the American Medical Political Action Committee. In 1963 Doctor Nelson was honored as Weatherford's outstanding citizen. □



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Supreme Court Ruling Could Result In More Physician Lawsuits

In a ruling handed down May 17th, the Oklahoma Supreme Court stated that employees covered by Workmen's Compensation Insurance may bring action against their attending physician if negligence is alleged. Prior to the courts edict, physicians were immune from lawsuits in Workmen's Compensation cases. The theory was that they were agents of the employer and any action as a result of the treatment must be brought against the employer rather than the physician. The reversal of existing case law could result in more lawsuits being filed against physicians.

In the landmark decision, *ELBA P. GERMAN v. CHEMRAY*, the court cited the following reasons for its actions:

"Only those rights intended to be covered by the Act are within the exclusive jurisdiction of the State Industrial Court. A physician is a stranger to the Act and does not share its burdens. Thus he should not be entitled to its benefits. Liability of a physician is predicated on fault while that of an employer is based on relationship. Acceptance of a settlement under workmen's compensation should never be a bar to a suit against a physician who was not a party to the settlement. Nothing in the Act provides aggravation of an industrial injury by a physician or surgeon is to be regarded as part of the original injury. Cases are legion where compensation for the industrial injury would be grossly inadequate to compensate an injured worker for the consequences flowing from malpractice. It is an elementary presumption that a wrongdoer should not be relieved of responsibility for his wrong because of arrangements made between the injured person and his employer; arrangements that are no concern of his."

In overturning the lower courts decision, the judges cited, "Any other construction would do violence to the intention of the Legislature, penalize the injured workman and give an unearned benefit to a negligent third party." □

US Death Rate Declines Markedly

The nation's health shows steady improvement, according to a 25-year mortality survey by the National Center for Health Statistics.

Since 1950, the death rate from stroke and heart disease has declined steadily in those

aged 25 to 74 and deaths from tuberculosis, once a leading cause, now number 3,000 annually.

Dorothy Rice, the Director of the Center, told the Senate Health Subcommittee, "the spectacular decline in death rates from heart disease may well reflect improvement in medical care . . . there appears to have been no reduction in the incidence of heart disease during this period of sharply declining mortality."

The mortality rate from heart disease dropped 30 percent in those aged 45 to 74, with the biggest gains coming in the last six years.

The death rate from stroke fell even more sharply during this period — a 50 per cent decline for the 45-64 age group and a 45 per cent reduction for those 65 to 74.

The aging of the entire US population is demonstrated by the decline in the overall death rate. After leveling off in the 1960's the death rate has steadily declined in the 1970's and reached an all-time low in 1975 of 8.9 deaths per 1,000 population.

Lung cancer had the biggest jump in death rate, doubling in men and going up four times in women since 1950.

The increase has offset declines in the death rate from cancer of the stomach, rectum, cervix, and uterus.

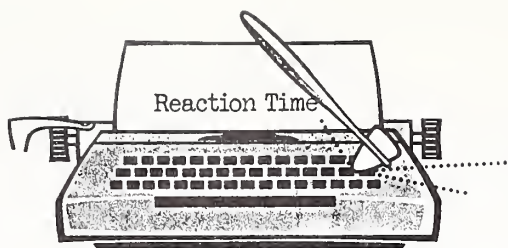
Infant mortality declined from 29.2 to 16.1 deaths per 1,000 live births, but the United States still ranks 15th in infant mortality.

"The total rate . . . masks persistent differences for major population groups," reports Mrs. Rice. The death rate for black infants is 41 per cent higher than for whites, and for black infants the mortality rate during the first four weeks of life (18.3 per 1,000 live births) exceeds the death rate of white infants during their entire first year of life (14.2).

Mrs. Rice attributes this to the high birth rate among black teenagers with the attending lack of adequate prenatal care. □

DATES TO REMEMBER

Board of Trustees	August 27th, 1977
(OSMA Headquarters)	November 19th, 1977
	February 18th, 1978
Council on Planning and Development	October 28th-30th, 1977
(Shangri-La Lodge, Afton, Okla.)	
Council on Planning and Development	March 3rd-5th, 1978
(Oklahoma City)	
Oklahoma Medical Summit	May 4th-7th, 1978
(Oklahoma City)	



More About The EPSDT Program Ineffective, Should Be Changed: AAP

The following is reprinted from *News and Comment*, Vol. 28, No. 1, January, 1977, through the courtesy of the American Academy of Pediatrics.

"The American Academy of Pediatrics can no longer be supportive of Early, Periodic Screening, Diagnosis and Treatment (EPSDT) in its present guise," according to a policy statement approved by the AAP Executive Board at its October meeting.

The report to the Board criticized EPSDT because it has proven to be an expensive and ineffective way of achieving care for children who heretofore had received little or no care.

The Academy must work for change in the EPSDT legislation, the Board said, by providing consultation with regard to the essential components necessary for effective, financially realistic child health legislation. In support of initial EPSDT goals, the report recommended that the Academy work for a major division in the Department of Health, Education and Welfare, reporting directly to the Secretary which would be responsible for all child health activities including EPSDT.

To implement its decision to improve the law, the Board asked the Advisory Committee on EPSDT to formulate some specific policy suggestions on the program.

EPSDT is a program under Title XIX of the Social Security Act which requires that all states provide specific health services to Medicaid recipients under 21 years of age as of July 1973.

The Academy has long supported the intent of the law and done much to assist in its practical implementation. In October 1972, the AAP Executive Board issued a policy statement which was supportive of the program's goals and encouraged active involvement of the membership. In further support of the program, the Academy identified a pediatrician in each HEW region to serve as liaison to the re-

gional Social and Rehabilitation Service (SRS) offices, accepted a contract from SRS to develop an EPSDT screening manual and a manual on administration, diagnostic and treatment services, and appointed a Committee on EPSDT which worked closely with the Medical Services Administration.

In 1975 the Academy received a contract from the Medical Services Administration to determine how to increase participation of professional health care providers in the implementation of EPSDT. The study pinpointed the following problems: inadequate fees, slow payment, excessive paper work, private physicians not allowed to screen, no follow-through, inadequate records, overdiagnosis, inappropriate screening and severe lack of communication from the top down. The Academy has applied for a one-year continuation contract to develop solutions to some of these problems but its proposal has to date not been approved by the Medical Services Administration due to lack of funds. □

April 26, 1977

Mark R. Johnson, MD
Editor and Chief
The Journal of the Oklahoma
State Medical Association
601 NW Expressway
Oklahoma City, Oklahoma 73118

Dear Dr Johnson:

In the paper entitled "Current Status of Adjuvant Therapy for Breast Cancer" which appeared in the March, 1977 issue of the Journal of the Oklahoma State Medical Association, the statement appears that "the mass of data suggests that radiation as the only adjunct is rarely indicated if adequate surgery has been performed both because of the lack of effect on survival and the fact that early regional recurrences can be controlled once they have become apparent." This statement is, upon examination of additional data less clear than might appear on the surface and we should like to offer the following clarification in the hope of preventing misunderstanding.

Radiation therapy, given electively to patients at high risk, is effective in over 90% of cases in preventing local or regional recurr-

ence. While similar control rates may be achieved in the treatment of small local recurrences only a small number of regional recurrences can be classed as small and local at the time that they appear. All too often the recurrences are of large size or multifocal and are rarely satisfactorily controlled. There is also a distinct impression on the part of clinicians, that those patients who have gross recurrence following systemic therapy show a poorer response to radiation therapy than do previously untreated patients.

The results presented by Drs Fisher and Bonadonna at the November 1976 Symposium entitled "Breast Cancer — A Report to the Profession" indicate that it is highly unlikely that women in the postmenopausal age group are significantly benefitted by the adjuvant systemic chemotherapy tested. For premenopausal patients the likelihood of recurrence is unaltered although the appearance of recurrence is delayed. This information has appeared since the submission of our paper to the Journal and we feel it imperative to revise our recommendation and to now state that in the interest of improved regional control all patients considered to be at high risk should receive adjuvant radiation therapy.

Sincerely,
Morris J. Wizenberg, MD
Theodore J. Brickner, MD

BOOK REVIEWS

PATHOGENIC MYCOPLASMA: A Ciba Foundation Symposium. 404pp, illustrated, New York; American Elsevier Publishing Company; 1972.

Interests in and knowledge of the mycoplasma group of organisms has burgeoned in recent years. It is not possible to include in any one symposium a discussion of all of the mycoplasmas associated with diseases of man, animals, and other forms of life. This monograph lists 21 human diseases for which mycoplasmas have been suggested as etiologic agents. Subjects discussed in detail include *M. pneumoniae* in organ cultures, mixed infections of mycoplasmas with malaria parasites in rats and with viruses in tracheal organ cultures, the ultrastructure of animal plant and insect mycoplasmas, immunochemistry of

mycoplasma membranes, and the isolation characterization of mycoplasma viruses.

The one chapter dealing with human disease, supports the association of *M. fermentans* with rheumatoid arthritis. The heated discussion that follows this formal presentation indicates the controversy which exists about the pathogenicity of species other than *M. pneumoniae* for man.

A large portion of the symposium is concerned with information on insect and plant pathogens. More than 50 plant diseases are currently believed to be caused by mycoplasmas transmitted by insect from plant to plant.

This monograph concerns an important new topic but it will be of little interest to clinicians because of the scanty information given about human disease. *Harris D. Riley, Jr., MD*

Escherichia Coli and Man. E. Mary Cooke, Churchill Livingstone, Edinburgh, 1974, 96pp, \$8.50

This short book concerns *Escherichia coli* primarily from the point of view of the clinical microbiologist. In the foreward, Professor R. A. Shooter emphasizes the increasing problem of infections caused by *E. coli* and other gram-negative enteric bacilli. The book is divided into six chapters and a section on technical methods. The first chapter entitled "Laboratory Aspects of Escherichia Coli" contains the anticipated description of biochemical properties and serological behavior of the organism. There is also a discussion of colicine typing and a brief review of transfer of antimicrobial resistance. In the second chapter dealing with distribution in nature and epidemiology, the author has pulled together concise summaries dealing with the acquisition of *E. coli* by young animals and human infants and also on the fate of ingested *E. coli*. Other chapters deal with the role of *E. coli* in diseases of the urinary tract, of the gastrointestinal tract and of other organ systems. There are also sections dealing with antibiotic resistance of *E. coli* and the chemotherapy of infections due to it. Most of these chapters contain very little new but do represent a useful compilation of developments regarding the role of this organism in various types of human disease.

Generally speaking, the author who is obviously familiar with an extensive literature, has written a running, annotated bibliog-

raphy. The chief defect is that sections end without clearly explaining points or with non-committal statements about areas of controversy. In most instances the original paper should be cited.

The book's greatest use will be as a bibliographic reference. *Harris D. Riley, Jr., MD*

Simple and Direct: A Rhetoric for Writers.

By Jacques Barzun, 224pp, illustrated, New York, Harper and Row Publishers, 1975, \$10.00

Jacques Barzun, formerly Provost of Columbia University, is widely known as a teacher, scholar and author. His writing style is precise and immaculate. His analysis of the writing styles of others is "simple and direct" and often devastating.

He divides the book into eight sections. The first six deal respectively with diction, linking, tone and tune, meaning, composition, and revision. In each he provides basic and important principles about writing and concludes each portion with an example of good writing. Throughout he provides sound advice or admonitions. For example, in the section on diction he states, "make sure you know not only the meaning but also the bearings of the word you use," "have a point and make it by means of the best word," and "look for all fancy words and get rid of them." Numerous other logical guidelines could be cited.

Serious students of writing will benefit from surveying and studying this book. The novice who believes that reading it will make him a finished writer will be disappointed. *Harris D. Riley, Jr., MD*

Principles of Modern Immunobiology:

Basic and Clinical. B. H. Park and Robert A. Good; Lea and Febiger, Philadelphia, 1974, 617 pgs, \$20.00

This book is designed as an introduction and overview of immunobiology for practicing

physicians and graduate students in the biomedical sciences. It provides a very adequate overview of modern immunology.

It is divided into two parts which are approximately of equal size. The first part, dealing with basic immunobiology, is well written and informative. The material covered in this section is available from other sources but the authors have provided a valuable service in putting it together in one place.

The second part of the book deals with clinical immunobiology. A wide variety of diseases and syndromes are discussed from the immunologic viewpoint. Particularly commendable is the emphasis on the relationship of clinical problems to basic principles.

Each chapter has a list of references which are up-to-date and the illustrations are excellent. The book can be recommended for its purpose. *Harris D. Riley, Jr. MD*

Immunobiology: Current Knowledge of Basic Concepts in Immunology and Their Clinical Applications. Edited by R. A. Good and D. W. Fisher. 305 pages. Stanford, Connecticut: Sinauer Associates, Inc., 1971. Price \$10.95.

Knowledge of immunology continues to proliferate at a rapid pace and publications have attempted to keep pace. The editors of this volume present a collection of review type articles concentrating on the more practical aspects of modern immunology. As pointed out, the publication is not intended for use as a textbook and no attempt has been made to cover the entire subject of immunobiology. It contains thirty in depth articles from thirty-two authors. The articles were originally published in a series of separate articles in *Hospital Practice*. The editors have purposely presented the topics with a clinical orientation. It is divided into five sections dealing with the development of the immune systems, the humoral antibodies, mediators and effectors of immunity, pathogenetic mechanisms and clinical application of immunology in therapy and in prophylaxis.

This book will be most useful to clinicians interested in bridging the gap between the huge accumulation of basic immunologic knowledge and its application. *Harris D. Riley, Jr., MD* □

The Role of Radiation Therapy In The Management of the Patient With Breast Cancer

Carl L. Bogardus, Jr., MD

There have been many studies reported, both in the past and recently, demonstrating the overwhelming value of postoperative radiation therapy for carcinoma of the breast. Very significant five-year-survivals have been reported in patients with both early and advanced disease by Guttman, Peters, Fletcher, Montague, Watson, del Regato, Weber and Hellman and many others.¹⁻¹⁵ Most of these studies have been under carefully controlled conditions and show, without any doubt, that radiation therapy is extremely beneficial in terms of local tumor control of the breast, chest wall and primary lymphatic drainage areas. These studies have been done on both patients in the postoperative state as well as patients who were considered inoperable, and were treated with curative radiation therapy in place of surgery. The survival attained in patients with early disease is very similar to that obtained with radical surgery or with varying combinations of radiation therapy and surgery.

The unfortunate factor that has always played a significant role in these series is the fact that the patients are almost invariably advanced cases. However, even in the more advanced cases of cancer of the breast, local control with radiation therapy can be established with an overall average of about 80% of all patients treated, but unfortunately distant metastases are present in an overwhelming majority of these patients. This leads to the inevitable consequence of the patients having a five-year survival very little different from those patients who also receive other forms of therapy or no radiation therapy at all. It is often reported that those patients who receive radiation therapy have shorter survival times than the group that does not receive irradiation.^{16, 17, 18} The fact that is seldom mentioned is that the patient selected for radiation therapy is usually a more advanced case or "the radiation therapy would not have been necessary." This type of case selection will obviously increase the risk of metastatic disease and a shorter survival time. Another factor that is usually disregarded in these reports is the quality of survival over this period of time.

For many years investigators have been

working on the theory that by the time a breast cancer patient gets to surgery, there are probably microfoci of tumor cells elsewhere in the body, especially if the cancer has already spread to adjacent lymph nodes. The chemotherapist reasons that the best way to deal with these distant microfoci is to treat them with drugs, but in doing so he loses sight of the local disease left on the chest wall and in the local lymph nodes.

It is distressing that because of the widespread sensational publicity of the past few years regarding the use of postoperative adjuvant chemotherapy in carcinoma of the breast that an accepted and proven modality, radiation therapy given postoperatively, has been almost totally discarded by many surgeons, even in cases where suspected tumor was left behind.^{18, 19} In the field of medicine it is very easy to fall into the pattern of "routine" treatments. Each case should of course be individualized, but to completely disregard an effective form of therapy and to substitute an experimental form of therapy is relegating 40,000 women per year in the United States to an uncertain fate. It may be many years before this is recognized as a fatal mistake. By then it will be too late for many of the patients who will have been entered into these experimental treatment schemes.

Adjuvant radiation therapy has long been proven to decrease the incidence of local and regional recurrence of operable breast cancer. This thesis has been retested and confirmed so often that no one should seriously question its validity.¹⁻¹⁵

If adjuvant chemotherapy can prevent proven metastasis from growing for a period of time, then certainly the combination of radiation therapy to destroy local macroscopic disease and chemotherapy to control or destroy distant microscopic disease would be an ideal combination and might constitute the treatment of choice for patients with both early and advanced cancer of the breast.

Recently there have been many sensational stories which reported "spectacular hope,"

Editorial

"breakthrough in the treatment of breast cancer," "dramatic effects from the combination of drugs," and many other claims. The authority behind all of this good news is James F. Holland, MD, a well-respected chemotherapist at the Mt. Sinai School of Medicine in New York, whose editorial appeared in the *New England Journal of Medicine*.²⁰ Appearing in the same issue is the article Combination Chemotherapy as an Adjuvant Treatment in Operable Breast Cancer by Gianni Bonadonna.²¹ All of these results are very encouraging, except for one important point; the cure rate of breast cancer has still not been proven to be significantly increased in Italy or anywhere else. Although the Bonadonna study is an extremely important one, its significance has been greatly exaggerated because of Holland's enthusiasm for it, and because of its widespread publicity and zealous promotion by many of the leading chemotherapists across the country.

At the conclusion of Bonadonna's article is a very important point often conveniently overlooked; "These results should be considered with caution since at the present time the effect of chemotherapy on survival and the possibility of long-term side effects remain unknown."

The discussion of the article also states . . . although our results appear promising since they translate into clinical evidence what has been strongly supported for many years by animal model systems, this optimism should be tempered by a few important considerations. First of all, not enough time has elapsed to indicate whether the difference in rate of recurrence can also affect the rate of survival, which remains in our opinion, the ultimate goal of adjuvant therapy. Studies on the natural history of breast cancer show that it appears to behave as a chronic disease, in which recurrence and death from progressive cancer can occur even 20 years after initial surgical treatment.

One of the conclusions that was reached in Bonadonna's work was that when Cytosan, Methotrexate, 5-Fluorouracil - (CMF) was given in advanced disease, the median duration of response was eight months, and the overall median survival 17.5 months. In view of these findings Bonadonna points out that it is more useful for the patients if he attempts to control

the disease when the tumor burden is minimal rather than when there is obvious gross disease present. This is also obvious in the analysis of the earlier work by Fisher which also points out the improved survival in patients who had a smaller tumor burden. This would be expected if one considers all of the variables of the mechanism of action of potent chemotherapeutic agents. These drugs are far more effective against microscopic foci of disease than against a large mass of tumor cells.

Examination of Bonadonna's work shows that many of the CMF cases that failed were local/regional failures. One can only conclude that his excellent results would have been even better if his rate of local/regional control had been higher. Past experience would suggest that this goal could be accomplished by the addition of adjuvant radiation therapy for the patients who are at relatively greater risk for such local recurrence.

Doctor Holland pointed out that radiation therapy following mastectomy has reduced local recurrence without definitive evidence of increased survival, presumably because survival depends upon the presence or absence of micrometastases at the time of operation. However, if adjuvant chemotherapy can sterilize such micrometastases, then local control by radiation therapy should constitute an even more important factor in these cases.

No true clinical investigator can have a bias against any type of rational controlled clinical trial, and most would welcome a truly randomized controlled study that would once and for all decide upon the values and relationships of surgery, radiation therapy, chemotherapy, immunotherapy, or any other reasonable modality for the treatment of cancer of the breast. So far, no such trial has been devised. The most uncontrollable factor in any of these clinical trial systems is the wide variation in technique of individual surgeons who must perform the definitive therapy in the beginning. This is coupled with an instinctive unwillingness to place *all* patients *randomly* into trials. It should also be noted that the wide range of variations that are possible in cancer of the breast make any form of clinical staging hazardous unless it is carried out with the utmost control. So far this has not been demonstrated adequately in any of the so-called random clinical trials that have been carried out.

Another of the major problems in launching any sort of full-scale nationwide trial utilizing a

combination of surgery, drugs, radiation therapy, or other modalities still lies in the problem of patient accrual. The critical factor is the surgeon and his reluctance to randomly assign *all* of his patients to any form of study that might in his opinion, "not be the best form of treatment."²² This problem is emphasized by the fact that the Italian study of Bonadonna was supported with \$300,000 of National Cancer Institute money. The reason the study was eventually assigned to Bonadonna and his group evolved from the fact that total institutional participation has never occurred in any national surgical adjuvant breast project.²³ Many individual members of institutions are extremely reluctant to put all of their patients into random clinical trials. The only group that would have been remotely interested in the CMF study was Fisher's group which was already involved in the L-phenylalanine mustard (L-PAM) study. The NCI searched about the United States for a large institution that would be willing to conduct the CMF study but found none. The surgeons at one leading institution stated "they still do not believe that there is a role for drugs in breast cancer therapy."²³ So, the NCI turned to Bonadonna and his group in Milan, Italy for the accession of patients for this study.

This fact points out that the institution of any form of large-scale, statistically valid breast cancer study is going to require the strictest cooperation amongst the participating physicians without the possibility of acute bias being injected into the study by the non-random accession of patients.

One of the biases that has been accused of being injected into Fisher's study is that randomization and control appear to have occurred at a point after the patients were selected to be included in the study rather than when the patients were first diagnosed as having cancer of the breast.²⁴ It has been pointed out that over a period of two years in 37 institutions there were only a total of 269 patients selected for the study.¹⁸ This is an average of only 3.6 breast cancers per institution per year. Undoubtedly many more patients who would have met the criteria for entry into the study were treated in each of these institutions. There was no indication in Fisher's study that there was any check to see whether such a small proportion of participation represented an unbiased sample.

Many experiments have been done to suggest that all reasonable steps should be taken to

maintain the cancer patient's immune capacity as high as possible. Over-enthusiasm for maintaining immunity in cancer can easily lead to therapeutic nihilism, since all of the available methods, except perhaps surgery, that are capable of destroying cancer, can be immunosuppressive. The prime duty of the therapist is to destroy as much tumor as possible. If this requires some compromising of the immunity system, then this has to be accepted. The rarity of spontaneous regression shows that immunity by itself is ineffective in the face of clinical cancer, and hypothetical considerations of immunity do not justify under-treatment.²⁵

Many comments regarding the immunosuppressive effects of radiation therapy have been written but none of these show convincing evidence that this form of treatment is significantly immunosuppressive unless extremely large areas of the body are irradiated.²⁶

There is probably little doubt that even localized radiation therapy can cause some transient suppression of the immune response. It should be pointed out that this transient suppression is considerably less than one sees with short-term, high dose or long-term maintenance type chemotherapy. The incidence of infection related deaths following immune suppression by radiation therapy is almost unheard of unless extensive areas of bone marrow are irradiated. The occurrence of infection, septicemia, and even death can be a frequent complication in patients with marrow suppression from intensive chemotherapy. It is reasonable to assume that anti-cancer and anti-bacterial immunity must be of very similar origin and must be directly related.

There have been many articles reported recently showing the undisputed immunosuppressive effects of long-term anti-cancer drug therapy. Also we are now beginning to explore the possibility of these drugs being oncogenic as well as immunosuppressive.²⁷

It was pointed out in an article by Holland reported in the *New England Journal of Medicine* in 1970 that the use of oncogenic drugs for the treatment of cancer is justified when other effective therapy is lacking.²⁸ When two or more forms of equally effective therapy are available, the choice of therapy becomes difficult and the hazards of each therapy must be considered. The need for long-term maintenance therapy is also an important decision, since the chronic administration of chemical

(Continued to page 286)

The Oklahoma Utilization Review System . . . known as OURS . . . officially began operation February 1st. The program was over 18 months in planning and development before it was fully approved and funded by The Department of Health, Education & Welfare.



The plan grew out of an attempt by your medical association to assist Oklahoma's smaller hospitals in complying with very stringent hospital utilization review regulations published on November 29th, 1974. At that time nearly 40 Oklahoma hospitals were identified that might have been unable to comply with those regulations because of professional staff limitations. The OSMA, working in conjunction with the Oklahoma Osteopathic Association and the Oklahoma Hospital Association, developed the OURS plan as an alternative to the UR regulations.

By the time the preliminary plan was taken to HEW, the sponsoring organizations realized that they had an alternative not only to the utilization review regulations, but possibly to the Professional Standards Review Organization law itself.

In its simplest terms the OURS plan is a computerized, retrospective, statistical audit of hospital performance. The performance is compared to norms or criteria established by Oklahoma physicians.

OURS is a 12-month demonstration project to prove . . . or disprove . . . the theory that a retrospective statistical audit is a useful method in evaluating hospital utilization. The plan also hopes to demonstrate that retrospective review will cause fewer interruptions in hospital care than does prospective audit and will cost considerably less money than some of the elaborate review plans that require sophisticated technical equipment and personnel. Some prototype PSROs spend as high as \$15.00 per claim for review; OURS costs about \$1.00.

At the end of its first three months of operation, OURS appears to be proving its own value.

The baseline data being used by the OURS program covers the last six months of 1976. During that period, the denial rate . . . hospital claims totally denied by Medicare or Medicaid . . . for the entire state of Oklahoma, was 1.22 percent. This represented approximately 1,000 claims being totally denied out of nearly 85,000 filed. At the end of the first full quarter of operation under the OURS Plan, the denial rate had dropped to eight tenths of one percent, or a total of 350 claims out of 42,000.

During the first three months of operation, the Medicare carriers reported a dramatic increase in the number of admissions being denied by the hospital utilization review committees. The decrease in the number of retroactive total denials and the in-

crease in hospital denials is an indication that the hospitals are carefully screening their admissions.

The percent of claims that are partially denied . . . where the carrier feels that some of the hospital stay was not justified . . . has also decreased. During the baseline period, partial denials accounted for two tenths of one percent of all claims. During the first three months of OURS operation this performance level was cut in half.

An interesting correlation to the decrease in total denials and partial denials is an increase in the average length of stay, up from 8.58 days to 9.25 days. This increase was predicted. As the hospitals tightened up their admission review procedures, the number of short stays decreased and the average length of stay reflects those cases needing hospitalization. It is also encouraging to note that the changes in hospital practices have been accomplished with little or no complaints from hospital staff or administration.

At the end of the first full quarter of operation the OURS plan's regional review teams reevaluated all Oklahoma hospitals. On the initial evaluation, made in late January, 36 hospitals were found to fall outside of the OURS plan criteria. After reviewing the first quarterly reports, the review teams found only 13 hospitals whose performance outside of the criteria could not be explained.

The organizations that conceived OURS chose the Oklahoma Foundation for Peer Review to administer the plan. The Foundation was already the PSRO planning agency for Oklahoma.

It is obviously too early in the project to declare that the OURS plan has "proven" itself. However, the initial reports are promising, and the next six months . . . and the reports generated during that time . . . will tell us whether or not OURS is truly an alternative to PSRO. The OFPR Board of Directors is sufficiently confident of the effectiveness of OURS that the Secretary of HEW has been informed that it is the intention of the foundation for Peer Review to utilize the data and experience it gains under operation of the OURS plan to formulate its PSRO plan for Oklahoma.

The OURS plan was conceived in Oklahoma by Oklahoma physicians working in conjunction with Oklahoma hospitals. Its success will show that physicians and other health care professionals are responsive to governmental requirements without "guidance" from Washington bureaucrats.

If the plan is successful, it can serve as a model utilization review program for the entire nation, dramatically changing the PSRO concept with the net result being a savings to taxpayers of millions upon millions of dollars and proving once again that Oklahoma medicine is a national leader in innovation.

C. S. Lewis Jr. M.D.

Acute Hypercalcemia — A Review and Case Report Illustrating Therapeutic Value of Mithramycin

WILLIAM O. SMITH, MD
ROBERT D. LINDEMAN, MD

Severe hypercalcemia (serum calcium > 14-15 mg%) is a life-threatening situation. It must be considered in every patient with the underlying diseases described in this article, particularly when symptoms of neuromuscular depression develop. Treatment must be prompt to avoid rapid renal and cardiovascular deterioration. Some newer methods of therapy are described and a case report describing one of them is cited in detail.

INTRODUCTION

The routine screening of blood samples for calcium concentrations with the automated multichannel autoanalyzers (Technicon Instruments Corp.) has identified many patients

with unsuspected hypercalcemia. In most instances asymptomatic hypercalcemia is not a life-threatening circumstance, but it may lead to long term complications such as nephrocalcinosis and renal calculi. On the other hand, high blood calcium concentrations may produce rapid and disastrous consequences in the patient and may constitute a medical crisis, often with associated rapid renal failure. Hence it is important to recognize this situation and institute therapy promptly. Many cases of hypercalcemia are on the basis of malignant disease. With increasing efficacy of treatment of malignant disorders it has become more important to treat hypercalcemia in order to allow time for therapy of the malignancy to achieve its effect. A good example of the therapeutic efficacy of a new agent, mithramycin, is presented in the case report, following a discussion on calcium metabolism and the etiologies, manifestations and therapies available for hypercalcemia.

CALCIUM METABOLISM

In order to understand the principles involved in the therapy of hypercalcemia, a brief review of the homeostatic mechanisms involved in the control of calcium metabolism and more specifically serum calcium concentration is necessary. These are depicted in Figure 1.

The net daily absorption of calcium from the intestine normally ranges between 100 and 200

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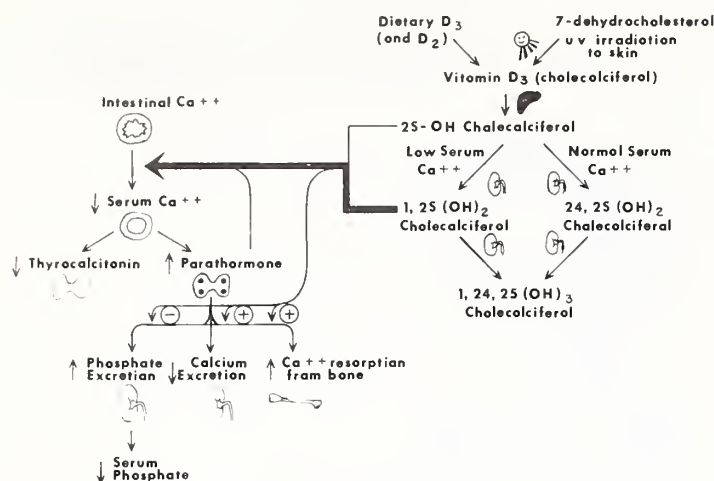


Figure 1. Homeostatic Mechanisms in Calcium Metabolism.

mg; this amount of the cation must be excreted in the urine to maintain calcium balance. The extracellular fluid calcium is in constant, dynamic equilibrium with the bone it bathes so that normally bone accretion matches bone resorption. Bone serves as the "storehouse" for calcium. A finely tuned endocrine system acts in concert to control intestinal absorption, bone exchange and renal excretion of calcium (and phosphorus) as shown in Figure 1. The long term maintenance of total body calcium, and specifically serum calcium, is dependent upon intestinal absorption of available dietary calcium under the control of the vitamin D system. If intestinal absorption of calcium is inadequate, serum calcium concentrations fall and this stimulates parathormone release from the parathyroids and suppresses thyrocalcitonin release from the thyroid gland. Parathormone is the major stimulus for mobilization of calcium from bone. This hormone also increases urinary excretion of phosphate, thereby lowering serum phosphate concentrations, and decreases urinary calcium excretion, aiding in the elevation of serum calcium concentration. Parathormone also enhances the effects of vitamin D on intestinal calcium absorption, again helping to raise serum calcium levels. Thyrocalcitonin has inverse biological effects to parathormone, being stimulated by an increase in serum calcium concentration.

The relatively recent and exciting elucidation of the metabolism and endocrinology of vitamin D has been detailed in a recent publication.¹ It will only be briefly summarized here.

Vitamin D₃ and its metabolites primarily function to control calcium absorption from the

intestine but they also have secondary effects on renal excretion of calcium and phosphorus and on calcium resorption from bone. Serum 7-dehydrocholesterol, a precursor of cholesterol metabolism and available in unlimited quantities, is converted by ultraviolet irradiation of the skin to vitamin D₃ (cholecalciferol). This, in turn, is converted by the liver to 25-OH cholecalciferol, an active metabolite of the vitamin capable of stimulating some intestinal calcium absorption. When serum ionized calcium levels fall below a certain level, more of this metabolite is further converted by the kidney to 1,25(OH)₂ cholecalciferol, a metabolite which is much more potent than its precursor in enhancing intestinal calcium reabsorption. It also increases renal tubular reabsorption of calcium (enhancing the effect of parathormone). This metabolite also increases the renal tubular reabsorption of phosphorus (antagonizing the effect of parathormone) and increases calcium resorption from bone (enhancing the effect of parathormone). Individuals with advanced renal disease retain only a limited capacity to accomplish this terminal conversion of the vitamin, resulting in poor intestinal calcium absorption. When the serum calcium concentration is normal, the 25-OH cholecalciferol is converted by the kidney to 24,25(OH)₂ cholecalciferol, an inactive metabolite. Both of these metabolites then may be converted to 1,24,25(OH)₃ cholecalciferol, also a relatively inactive metabolite. The current understanding of vitamin D metabolism is that vitamin D₃ (cholecalciferol) is an inert reservoir substance; 25,OH D₃ is the major circulating metabolite which is biologically active at high levels and 1,25(OH)₂ D₃ is the metabolite with maximal biological activity, which, together with parathyroid hormone and thyrocalcitonin, regulate the intestinal absorption of calcium and remodeling of bone.

Serum calcium exists in two states — ionized and un-ionized. Only the ionized portion is physiologically active. The un-ionized portion is either bound to serum proteins (primarily albumin) or complexed with various anions (such as citrate). The degree of protein binding is dependent upon the concentration of serum proteins (again primarily albumin) and the blood pH, the calcium binding increasing as the pH increases. Since one measures total serum calcium in the clinical laboratory, these factors must be kept in mind when one evaluates a serum calcium determination.

TABLE 1
ETIOLOGY OF HYPERCALCEMIA

DISEASE	ETIOLOGY
A. <i>Abnormal Metabolism of PTH</i>	
1. Primary hyperparathyroidism	Excessive PTH secretion and renal synthesis of 1,25(OH) ₂ D.
2. Ectopic hyperparathyroidism	Production of tumor of Pro PTH ? prostaglandins.
3. Thiazides	Potentialiation of peripheral action of PTH.
B. <i>Abnormal Metabolism of Vitamin D</i>	
1. Vitamin D intoxication	Excessive intake and production of 25(OH) ₂ D (liver) & 1,25(OH) ₂ D (kidney).
2. Sarcoid	? excessive renal formation of 25(OH) ₂ D.
Tuberculosis	
C. <i>Enhanced Bone Resorption</i>	
1. Metastatic tumors	Skeletal replacement of tumor with bone destruction.
2. Multiple myeloma	Production of osteoclast activating factor
Lymphoma	
3. Immobilization	Unknown
4. Thyrotoxicosis	Unknown
D. <i>Miscellaneous</i>	
1. Milk-alkali syndrome	Excessive intake of calcium and milk.
2. Adrenal insufficiency	Depletion of intravascular volume (ionized Ca++ normal).

(From Bell, Norman: Current concepts concerning the mechanisms and management of hypercalcemia and hypocalcemia [submitted for publication]).

ETIOLOGY OF HYPERCALCEMIA

The known causes of hypercalcemia are listed in Table 1 and are separated by the pathophysiology responsible for the increase in serum calcium concentrations. The most significant of these is malignant tumors, with or without demonstrable osteolytic lesions, although with the widespread use of multichannel autoanalyzers more patients with asymptomatic hyperparathyroidism are being identified. Malignancies are most likely to produce extremely high, dangerous blood calcium concentrations. In females the principle malignancy producing osteolytic disease is carcinoma of the breast; in males it is bronchogenic carcinoma. A number of other malignancies may produce osteolysis. It is now known that carcinomas arising from many different organs (principally lung) have the ability to produce a substance having biologic effects identical to parathyroid hormone. More recently it has been established that prostaglandins serve as mediators of hypercalcemia in certain types of malignancies.² When such tumors are removed or destroyed by cytotoxic agents, the hypercalcemia may disappear. Thiazide diuretics apparently induce hypercalcemia by decreasing urinary calcium excretion by a mechanism as yet unclear.^{3, 4}

The other important cause of hypercalcemia is hyperparathyroidism. Although not generally producing the extremely high serum cal-

cium concentrations of malignant disease, the hypercalcemia (11 to 14 mg% in general) may result in urinary tract stones with their attendant complications and soft tissue calcifications.

The other causes listed are either rarely seen now in adults or result in only mild hypercalcemia. Recognition of the elevated serum cal-

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Since his graduation from Upstate Medical Center at Syracuse, New York, Robert D. Lindeman, MD, has been certified by the American Board of Internal Medicine. Doctor Lindeman has been Professor of Medicine and Physiology at the University of Oklahoma College of Medicine and in July, 1977, he will accept the position as Chief of Staff of the Louisville Veterans Administration Hospital and also as Dean and Professor of Medicine at the University of Louisville School of Medicine. He is a member of the American and International Societies of Nephrology, a Fellow of the American College of Physicians, and a member of the Central Society for Clinical Research.

Hypercalcemia / SMITH, LINDEMAN

cium levels may assist in the diagnosis of these disease entities. Vitamin D intoxication during the treatment of hypoparathyroid subjects is often observed.

CLINICAL FINDINGS

Calcium affects the transport function of cell membranes, possibly by acting as a membrane stabilizer. Hypercalcemia decreases membrane permeability and cell excitability. Most of the clinical manifestations of hypercalcemia, with the exception of the renal problems (Table 2), can be explained by these effects. Calcium also influences the transmission of ions across membranes of intracellular organelles, the release of neurochemical transmitters at synaptic junctions, the synthesis, secretion, and metabolic effects of protein hormones, and the release and activation of intracellular and extracellular enzymes. The metabolic activities of calcium are discussed in greater detail in a recent review.⁵

With severe hypercalcemia the patient appears drowsy and lethargic and eventually stuporous. He may complain of marked weakness of striated muscles. There also may be anorexia, nausea and vomiting from poor function of smooth muscle in the G-I tract. Polyuria may be present even when the patient is dehydrated.

On physical examination generalized muscle weakness may be demonstrable and the deep tendon reflexes diminished or even absent.

TABLE 2	
CLINICAL FINDINGS IN HYPERCALCEMIA	
NEUROLOGIC	
	DROWSINESS, LETHARGY, STUPOR, MUSCLE WEAKNESS, FATIGUE, DIMINISHED OR ABSENT REFLEXES
GASTROINTESTINAL	
	ANOREXIA, NAUSEA, VOMITING
	CONSTIPATION
	ILEUS
RENAL	
	POLYURIA, NOCTURIA, THIRST, DEHYDRATION
	NEPHROCALCINOSIS, RENAL CALCULI
	AZOTEMIA
CARDIOVASCULAR	
	EKG - ↓ CONDUCTION
	BRADYCARDIA
	HYPERTENSION
	POTENTIATION OF DIGITALIS EFFECT
OTHER	
	PRURITIS
	BAND KERATOPATHY

Often intestinal ileus is demonstrable by infrequent or absent peristaltic sounds. Dehydration is common.

The electrocardiogram may reveal arrhythmias since calcium excess diminishes conduction velocity and shortens the myocardial refractory period. The most typical EKG finding is a shortened Q-T interval.

Two serious renal abnormalities may be encountered. As with hypokalemia the patient may develop pitressin-resistant polyuria. Although the cause of this problem in man has not been clearly established it has been postulated that the failure to concentrate urine appropriately is due to interference with the "sodium pump" in the ascending limb of the loop of Henle leading to a decreased hyperosmolarity in the medullary interstitium.⁶ Also calcium is known to produce an osmotic diuresis. Secondly, azotemia may develop with considerable rapidity and uremia is a common cause of death in untreated patients. Calcium is known to produce vasoconstriction,⁷ hence it is possible that a decreased renal blood flow is responsible for this dangerous complication.

Hypertension has been reported as a result of hypercalcemia but it is not clear whether this is a direct vascular effect or secondary to renal ischemia.⁸

Lastly, hypercalcemia potentiates the physiologic effects of cardiac glycosides. Hence, patients on this medication may develop digitalis toxicity when serum calcium rises.

THERAPY

Severe hypercalcemia must be regarded as a medical emergency. Table 3 lists the therapeutic agents and procedures currently available to lower serum calcium rapidly.

The importance of correction of dehydration and establishment of a urinary output of 3 liters or more daily cannot be overemphasized. This is best accomplished by the use of an isotonic saline infusion since the sodium tends to reduce calcium reabsorption by the renal tubule.⁹ Obviously caution must be exercised in patients who also have congestive heart failure. Although intravenous sodium sulfate has been advocated by some, this solution appears to have little advantage over saline and has the disadvantage of not being commercially available.

Although inorganic phosphate solutions given intravenously may rapidly lower serum calcium, this route of administration is not ad-

TABLE 3
TREATMENT OF SEVERE HYPERCALCEMIA

ADEQUATE HYDRATION WITH SALINE
LOOP DIURETICS (FUROSEMIDE, ETHACRYNIC ACID)
ORAL OR INTRAVENOUS PHOSPHATE OR SULFATE SOLUTIONS
ADRENAL CORTICAL STEROIDS
MITHRAMYCIN
INTRAVENOUS EDTA (ETHYLENEDIAMINE-TETRA-ACETATE)
INDOMETHACIN
PERITONEAL DIALYSIS OR HEMODIALYSIS

vised if the patient can maintain oral intake since extraskeletal calcification and hypotension have been reported in some patients.^{10, 11} The oral use of phosphates as a stable mixture of the sodium and potassium salts (Neutra-Phos) may be utilized more safely although the therapeutic effect may be delayed for 24 hours or longer. The dosage should be 2-4 capsules (0.5-1.0 gm. of phosphate) every eight hours. The larger doses commonly induce diarrhea. Fleet's Phospho-Soda also may be used in doses of 5-15 ml three times daily. Phosphate probably induces the decrease in serum calcium by increasing bone formation and decreasing bone resorption rather than binding of calcium in the intestine as had originally been postulated.

The use of the "loop" diuretic agents, furosemide or ethacrynic acid, given in large doses may induce rapid losses of calcium in the urine. The diuretic must be used only in combination with appropriate fluid and electrolyte replacement since large quantities of water, sodium, potassium and magnesium are also excreted.¹² Doses of 80-100mg of furosemide may be injected intravenously every two hours and the diuresis sustained in this fashion for six to 48 hours as necessary, provided that replacement of non-calcium ionic losses is insured. It is vital that such patients remain well hydrated. Thiazide diuretics should not be used since they decrease urinary calcium excretion and increase serum calcium concentrations.

Large doses of adrenal cortical steroids may effectively lower serum calcium. Up to 100 mg of prednisone may be administered in a 24-hour period. However, 24-48 hours is usually required for a significant response. This agent is known to decrease calcium absorption from the intestine.¹³ Forty milligrams of prednisone daily for one week will correct the hypercalcemia (by decreasing vitamin D-mediated calcium absorption from the intestine) in most cases of sarcoidosis, multiple myeloma and vit-

amin D intoxication and about one-half the cases of non-osseous malignancy including the peptide secreting tumors. It is less effective when there is extensive bone invasion and only rarely effective in hyperparathyroidism.

Mithramycin, a cytotoxic agent has been shown to lower serum calcium, particularly in patients with malignant disease, and may well prove to be the drug of choice in the severe hypercalcemia associated with malignant disease.^{14, 15} It is effective in most patients when given in small dosage (25 μ g/kg body weight/24 hours) and more than three doses is rarely required. Adverse side effects are unusual with this dosage level. A case report utilizing this therapy is appended.

Versene (Sodium EDTA), a calcium chelating agent, may rapidly decrease high blood calcium levels (each gram of the drug binds 100 mg of calcium). However, if used repeatedly, renal failure may develop. Hence it should be used only when other measures fail and only a single dose of 5-10 gms given intravenously.

In the patients referred to above where prostaglandin appears to mediate the hypercalcemia, indomethacin appears to modify the hypercalcemia.² Lastly, one may have to resort to either peritoneal dialysis or (preferably) hemodialysis to effect a reduction of blood calcium in emergency situations.¹⁶

Calcitonin has been demonstrated to be effective in some patients with hypercalcemia but is not commercially available at present.

Obviously after severe hypercalcemia is brought under control, therapy of the underlying disorder must be instituted or the hypercalcemia will promptly recur as shown in the subsequent case report.

CASE REPORT

A 62-year-old male was admitted to the Oklahoma City Veterans Administration Hospital in June, 1975, with a two-month history of hoarseness and shortness of breath. He was found to have a paralysis of the left vocal cord and on bronchoscopy, a biopsy showed a squamous carcinoma of the lung. He was treated with radiation therapy but refused further chemotherapy. He was readmitted on 9/26/75 (Day 0 in Figure 2) for evaluation of multiple lytic lesions in the ribs, spine and other bones, hypercalcemia and dehydration. The serum calcium concentration on admission was 16.2 mg%, the serum phosphorus was 3.0 mg%, the

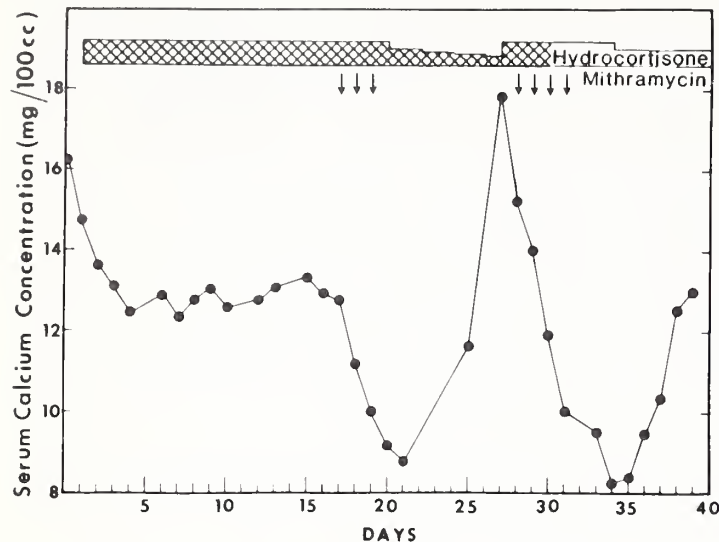


Figure 2. Effect of Mithramycin on Hypercalcemia in a Patient with Bronchogenic Carcinoma.

serum creatinine was 1.4 mg%, and the serum urea nitrogen was 28mg%. With hydration and a diuresis induced by normal saline and furosemide, the serum calcium concentration fell to 14.7 mg%. On day 1, he was started on hydrocortisone 100 mg three times daily and over the next two weeks, the serum calcium concentrations ranged between 11.7 and 13.3 mg%, serum phosphorus concentrations ranged from 1.9 to 2.7 mg% and serum creatinine and urea nitrogen levels returned to the normal range. He continued to complain of anorexia, nausea and fatigue and he appeared confused.

On the 17th hospital day when the serum calcium concentration was 12.7 mg%, he was given mithramycin in daily dosages of 1500 mcg (25 mcg/kg body weight) for three days. The response of the serum calcium concentrations to this therapy is shown in Figure 2. Three days after his first dose of mithramycin, his sensorium cleared and his appetite improved remarkably. He was discharged on the 21st hospital day to return to the Oncology Clinic in four days for further therapy. On return his serum calcium was 11.6 mg% but no therapy was given. Two days later he was readmitted comatose with pneumonia and a urinary tract infection. His serum calcium concentration was 17.8 mg%, his serum phosphorus was 3.2 mg%, his serum sodium was 148 mEq/l, his serum potassium 2.5 mEq/l, his serum chloride 97 mEq/l and serum bicarbonate 41 mEq/l. His serum urea nitrogen concentration had increased to 42 mg%, peaked the next day at 48 mg% and thereafter fell over a four-day period to normal

levels. He was hydrated with saline and given furosemide the first day. The next morning, he was given the first of four additional doses (1500 mcg per dose) of mithramycin therapy. The changes in serum calcium concentrations again are shown in Figure 2. His serum phosphorus concentration fell to a low of 1.8mEq/l and serum potassium to a low of 1.8 mEq/l after the mithramycin therapy. His platelet count fell from pre-treatment levels of 300,000 cu mm to a low of 96,000 cu mm five days after completion of therapy but white blood cell counts (7,000 to 13,000 cu mm) and hematocrits (22-25 vol%) remained unaltered. Because of the fall in platelet count, mithramycin was discontinued and oral sodium phosphate therapy (Fleet's Phospho-Soda) was utilized for further therapy. The patient's condition deteriorated after a course of cytoxan, methotrexate and 5-fluorouracil caused a marked pancytopenia and he died 20 days later. Serum calcium concentration during oral phosphate therapy ranged from 9.6 to 13.0 mg% with most being in the range of 11 to 12 mg%. Serum alkaline phosphatases were increased and serum albumin concentrations were borderline decreased only during the terminal phases of illness.

COMMENT

This patient showed the rather common clinical findings of anorexia, nausea, fatigue and confusion associated with hypercalcemia. With rehydration and a saline-furosemide diuresis, a rapid decrease in serum concentration was observed but normal levels were not reached and the patient remained symptomatic. Two weeks of high doses of hydrocortisone (300 mg daily) failed to control the hypercalcemia and its associated symptoms. As seen in Figure 2, three doses of mithramycin reduced the serum calcium concentration to low normal levels and there was a remarkable improvement in appetite and mental function. The patient redeveloped severe hypercalcemia with frightening rapidity (serum calcium concentration rose from 11.6 to 17.8 mg% in two days) with coma, emphasizing the need carefully to follow the serum calcium concentrations in such patients until an appropriate maintenance dose is established. After an additional four doses of mithramycin, the patient developed a thrombocytopenia which could have been due to either tumor invasion of the bone marrow or the mithramycin therapy. Because the mild throm-

bocytopenia persisted, mithramycin was discontinued and oral sodium phosphate therapy was administered with only limited relief of symptoms. Patients with hypercalcemia tend to develop hypokalemia, and, if the cause of the hypercalcemia is a tumor producing parathormone-like material, there will also be a hypophosphatemia, as seen in this patient. It was particularly striking to note the fall in serum phosphorus and potassium levels associated with the mithramycin therapy, an effect which remains unexplained.

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Nutrition and the Athlete

Conditioning

Child and Adolescent

Adult

Equipment for Contact Sports

Team Physician — Coach Relationship

as Seen by the Coach

Eugene Luckstead, MD

Thomas Coniglione, MD

Ronald Ratliff

Eugene Luckstead, MD

Thomas Coniglione, MD

Donald Cooper, MD

Henry Manning

SATURDAY, JULY 30th—P.M. SESSION — 1:30 — 3:00

On the Field Evaluation of Athletic Injuries

Treatment of Partial Sprains and Strains

Taping, Demonstration, and Examination

Donald Cooper, MD

Jeff Fair

SUNDAY, JULY 31ST — A.M. SESSION — 8:00 — 12:00

Evaluation of Knee, Ankle and Shoulder Injuries

Common Hand Injuries in Sports:

Their Treatment and Rehabilitation

Rehabilitation of Knee and Shoulder Injury

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Preparing A Medical Manuscript For Publication

KAREN T. HACKLEMAN

Clear reporting in a logical format and the selection of an appropriate journal are essential in preparing a medical manuscript for publication.

The formal scientific journal remains the most frequently used medium for the transfer of information: a medium in which medical authors strive to communicate important findings to their colleagues.¹ Both medical editor and reviewer serve as preliminary agents for evaluating a manuscript before it reaches its public. The greatest problem in medical writing today is not what the author writes about but how he presents his material — in other words — clear reporting. Too frequently medical authors strive for the authority that comes with exposure in medical journals; thus, the result is medical literature cluttered with much that could be left unsaid.²

The purpose of this paper is to identify the types of articles that can be submitted to medi-

cal journals and to offer suggestions for preparing the manuscript. Medical subjects will be used as examples, but the paper will emphasize style and mechanics rather than evaluate valid subject matter.

After the medical author (hereinafter called "author") has decided to prepare an article for publication, the first decision must be the selection of an appropriate journal and the arrangement of the material into some suitable format. The choice of journal — whether of a general or specific nature — is important as it will determine the audience the author is trying to reach. The potential author should carefully read the "instructions for authors" of the journal to which he plans to submit the manuscript. Usually the instructions are printed in each issue of the journal. If not, two current references are available: *Information to Authors* (editorial guidelines reprinted from 140 Medical Journals, 1976-1977, compiled by Harriet R. Meiss and Doris A. Jaeger, New York: Mount Sinai School of Medicine, 1976, and Nancy D. Lane and Kathryn L. Kammerer's *Writer's Guide to Medical Journals*, Massachusetts: Ballinger Publishing Company (subsidiary of JB Lippincott Company), 1975.

The audience the author is trying to reach is important. A unique approach to augmentation mammoplasty or the complications of the technique would appropriately be submitted to the

Journal of Plastic and Reconstructive Surgery, rather than, for example, the *American Journal of Surgery*. However, a review of all the surgical procedures on this subject which have evolved during the past ten years could very well be submitted as a review article to the *American Journal of Surgery*. The standards used in selecting manuscripts vary with each journal.

The *Southern Medical Journal** accepts several types of articles: editorials, commentaries, primary articles, review articles, current concepts in diagnosis and treatment, case reports, clinical briefs, special articles, special features, and letters to the editor. An author may propose material for publication for any one of these categories. Primary articles and case reports are usually submitted; commentaries, editorials, review articles, and current concepts may be invited or submitted in addition to those written by the editor. Although the medical editor may review an article written for one category, he may choose to publish it in another. In a recent interview, Dr. Harris Riley, Editor of the *Southern Medical Journal*, stated that the *Journal* had received a lengthy manuscript for submission as a "primary article." After reviewing the material, Dr. Riley felt because it was comprehensive and well referenced, it should be published as a "review article." In some instances, material is received that does not fall into any of the above categories and may be of a special nature. This material is then captioned "special article."

Papers pertaining to similar subjects but submitted in varying formats may be published in the same issue. An editorial, "Atherosclerosis — a pediatric problem," introduces the March 1975 issue of the *Southern Medical Journal*. Two other types of articles are published in the same journal: (1) a review article entitled, "Primary prevention of atherosclerosis: a challenge to the physician caring for children," and a special article on the nutritional aspects involved with prevention of atherosclerosis, written by authors cognizant of risk factors of coronary heart disease associated with dietary habits.

TYPES OF ARTICLES**

Editorials: Editorials can be found at the beginning of a journal or near the end. Editorials

are usually written by the editor, member of the editorial board or solicited from someone knowledgeable in a specialty area. Although the subject of an "editorial" is confined to one idea, there may be more than one editorial published in a single issue. Normally, they do not make use of illustrative material; however, they are referenced. An example of a recent "editorial" is entitled, "In search of thin lethal melanomas," by Alexander Breslow (November 1976, *Surg, Gynec, Obstet*): it is approximately 300 words in length and is the only editorial published in that particular issue. Comparatively, the November 15, 1976, issue of *JAMA* contains three editorials.³

Primary articles: Primary articles and case reports are most frequently reported. Beginning with an abstract of approximately 100-200 words, the "primary article" treats single or multiple medical problems and may include discussion, conclusion or summary, or a combination of the three. Illustrative material is often used to substantiate the article, whether it is lengthy or not. One reason for this popular style of expression is its flexible arrangement; it does not necessarily need the rigid format of the "case report." Only references used in the manuscript should be listed.

Current concepts: Current concepts, long or short, describe the past and present therapy and diagnosis of diseases and are usually solicited. Authors basically review these concepts and discuss their treatment. The writing of an abstract for current concepts is optional. The introduction briefly states the concept and is followed by the identification of the disease, and finally, specifies the treatment. Current concepts may relate to case reports and report the significance of a new concept; the narrative may discuss a new product; it might even set guidelines for use. References may be few or many, but only those cited in the text are listed. Tables and graphs that support clinical findings are typical of illustrations used.

Review articles: The introductory paragraphs of a "review article" tell why the review is being written, names the institution where the material was gathered, and if a review of cases, may stipulate the number of cases discussed. Dates in a "review article" are important. Not only do they define time frames, but they also establish a reason for writing the article; for example, the author may trace the history of a disease from the first to the last case reported. Following the introduction, the statistical data

*Note: Examples are used from the *Southern Medical Journal*; the author of this paper served with the *Journal* in a practicum situation.

**Based on those considered by *Southern Medical Journal*

and clinical findings are revealed; and the article is concluded with the author's critical evaluations. A "review article" may be published either in a specialty journal or a general medical journal: one reason for submitting a "review article" to a general medical journal (JAMA) is to expose important findings to medically-interested people or provide a foundation for searching new material.⁴ Although this type article may not add new information to the treatment or therapy of a disease, it does give the reader a chance to learn about the literature published to date and may verify findings of other authors. Some journals insist that references be cited only if they appear in the text; others accept the author's complete bibliography. Review articles may be long or short; and their accompanying reference lists also vary in length. A "review article" published in the *Southern Medical Journal* (Jan. 1976) is five pages long, listing eight references. The March issue of the same year carries a "review article" seven pages long citing 59 references.

Case reports: Case reports should be short and clearly defined.⁵ The format is basically tripart: introduction, case history, discussion, and sometimes, summary. The introduction informs the reader of the purpose in reporting the case, and the section detailing the case history is normally printed in smaller type and gives the facts about the case. In the discussion, the author states his findings and how they relate to those findings reviewed in the literature. If an author is writing a "case report" to provide pertinent information on a specific surgical procedure, it is not necessary to chronologically reference all of the former approaches to the procedure. Nevertheless, in order to establish a time frame, it is better to note the first case reported (author, year) in parentheses and then summarize by citing one article in which the previous approaches have been reviewed, which incidentally, may be the only one the author has read. The author can then relate that summary with his own findings. This is an honest approach and leaves less room for plagiarism.⁶ Case reports should not be confused with studies of case histories. A "case report" describes one unique case originating from one institution; a study of case histories provides clinical findings and statistical analyses of several cases. The reports of these cases may be from more than one institution.

Others: Special features and articles: Special features are usually solicited and may show the results of a radiology report or a clinico-pathologic conference. During the past two years, the *Southern Medical Journal* has published a series of "eponyms", ie, Baker's Cyst, in their special features section. Often papers presented at scientific meetings or articles of a special nature, ie, history of a medical society, items of a biographical nature or some other medically-related topic are submitted in this format.

LOGISTICS OF THE MANUSCRIPT

Preparing the article for submission: Even with the use of an outline, the most professional writer will have some difficulty in organizing and changing sentence structure in the mechanical drafting of his manuscript. Of course, familiarity with the subject is important, but how the subject comes across to the reader is equally important.

Style: The inverted pyramid style formulated by Dr J. A. Sanchez,⁷ Scott & White Clinic, Temple, Texas, is popular and emphasizes simplicity and directness. He states the most important ideas first, with the others following in decreasing order. This form facilitates rapid reading and satisfies the reader's curiosity; the technique simplifies journal scanning and more importantly tells the reader at first sight what the article is all about. Time has been saved for both author and reader.

Paragraphs: Paragraphing is the mechanical process used to guide the reader; it unifies the paper and adds to the understanding of the reader. The length of the paragraph is determined by the subject matter. Paragraphs develop the paper by providing continuity of thought and smooth transition from beginning to end; sentences are included which are either details or generalizations. Details are specific. In medical writing, as in other forms of scientific media, details are facts which can be verified. Besides supporting generalizations, details provide clarity, stimulate interest, and are used to illustrate. Although details may substantiate or contrast ideas, be supportive or argumentative, they may also show the relationship between cause and effect.⁸ Generalizations are deductive; they lead the reader from the general to the specific. This type of sentence is acquired from scanning the literature, from

statements made by other authors and speakers, and from the author expressing his own opinion. Generalizations may mean different things to different people. For example, a surgical procedure may be described by two surgeons. The conspicuous details will be the same; however, the arrangement of the narrative will be different. The order will depend on the interest of the author-surgeon and his past experience. Expository paragraphs give directions, interpret opinion, and usually begin with facts and proceed to the general. Skilled paragraphing requires a good eye, a good ear, and a logical mind.⁹

Each medical journal, whether of general or specific nature, follows its own standards for publishing. Photographs, charts, graphs, etc, should be well chosen to support and not pad the article. For this reason, medical editors now limit the number of illustrative materials that can be used with each article. The *American Journal of Surgery*, as well as many other journals, request the author to follow the style of the *Index Medicus* regarding references and abbreviations. They also request that references be listed on separate, unnumbered sheets. However, the author should check the journal to which he is submitting his manuscript before numbering his own list of references. Although the *Journal of Bone and Joint Surgery* specifies that references be numbered and listed alphabetically, the *Journal of Maxillofacial Surgery* presents their references unnumbered and arranged alphabetically. In the "information for authors" section in JAMA (as well as in many other journals), the editor requests authors to submit their numbered, reference list on separate sheets in numerical, consecutive order as cited in the text. This latter specification conforms with the directive of the *AMA Style Manual* (15.01). In the "information for authors" section, medical editors also instruct their authors to use "a minimum amount of illustrations, professionally prepared." Added information including extra costs, number of

manuscript copies to be sent, information on ordering reprints, and instructions to book reviewers are among the editorial notices.

Illustrations: Identified black and white photographs, usually 5" × 7" glossy prints (smooth configurations) are requested. When they are published, they are reproduced as half-tones. Color prints, although usually discouraged because of the expense involved, are sometimes accepted especially if color makes the message more visible. Line drawings and art work are requested in black india ink. Legends for illustrative material, as well as for tables and graphs, should be drawn or typed on separate, unnumbered sheets. A word of caution: never submit illustrations which have previously been published without consent of the author or holder of the copyright.¹⁰ Prints should be mounted with rubber cement, as paste or glue will damage them.

Tables, including charts and graphs, make up an important part of the visual presentation of a manuscript; they should supplement, rather than restate parts of the text. Table titles should not be more than two lines and column headings should clearly describe the data which follow. Although an illustration in a journal can contain more information than one accompanying a speech, the message content must be precise. When selective data have been reduced to a minimum, a proofreader normally can simplify it further.¹¹ Printed material has one self-correcting characteristic which is not true of most other forms of communication. When the reader encounters a mistake or obscure meaning, he is able to rescan the material to eliminate it.¹²

Abbreviations: Medical literature is saturated with abbreviations and acronyms, often resulting in a need for an interpretation of the message. Also, medical abbreviations are not as universally accepted as, for example, chemical formulas, thus placing a burden on the reader's power of comprehension.¹³ Therefore, their use should be kept to a minimum. When abbreviations are used, they should conform to those approved by the standard medical reference books, such as the *Stylebook/Editorial Manual of the AMA*, *Index Medicus*, *Dorland's Illustrated Medical Dictionary*, *Stedman's Medical Dictionary*, *Webster's New Collegiate Dictionary* or *Webster's International*, using the latest edition of each. Abbreviations can be lower-cased, all capped, or a combination of the two; however, they are never used with periods. Al-

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though many standard tests and procedures are abbreviated (RBC for red blood count), a sentence should never begin with an abbreviation. Of course, there are exceptions to the following rules.

According to the AMA style manual, abbreviations should always be used with numerical quantities in units of measurement (1.21 and 21.02 *Stylebook/Editorial Manual of the AMA*). These are usually lower-cased — again written without periods.

Examples: centimeter cm
 pound lb
 The defect was 5 cm long.

The abbreviation for molecular weight is “mol wt” anytime after writing it out at first. The sentence should begin with “Roentgen rays” but afterwards abbreviated as “R.”

In clinical and technical data, terms are usually written out the first time with the abbreviation immediately following in parenthesis; for example, complete blood count (CBC) and afterwards “CBC.” The same is true with occupational therapy (OT); it is thereafter written “OT.” In each case after its initial use, the abbreviation is capitalized and then written without using parentheses. Again, electrocardiogram is simply stated ECG and ultrahigh frequency is written UHF. Other abbreviations are only used in tables or graphs and always written out in the text. Hematocrit is written out in a report but abbreviated “Hct” when it expresses a percentage in a chart or graph. Temperature is written out, however, it may be abbreviated “temp” as a table heading.

References: References in medical writing, as in other types of writing, relay two messages to the reader. One, they serve to document material taken from other sources and two, they provide easy access for the reader who wishes to do further study on the subject.

It is interesting to scan today’s medical journals, paying particular attention to the list of references in each article. One three to five-page article may have as few as five references and some in the same issue of the same length may exceed 100. Dr. Kampmeier, former editor of the *Southern Medical Journal*, has said unless the references are limited to those cited in the text, a long reference list may represent a false front. In my own experience in working

with medical manuscripts, I have noticed the tendency to use long reference lists rather than to selectively document. Sometimes in confirming or opposing statements, it is necessary to quote a secondary source, especially when the primary source is unavailable. The author, then, may state the reference in the following manner.

Example: Boroff in Edgerton, MT: Plastic reconstruction of congenital defects associated with spina bifida and cranium bifidum, *Surg Clin North Am* 32: 1327-1345, 1952. References which set historical time frames may be documented in the text by listing the author and year in parentheses (Converse, 1957). Again, the style and format of the reference list varies with each journal, and it is helpful to carefully check the journal in which the author intends to publish before drafting his manuscript. An acceptable formula for referencing books is:

Author, title, imprint (place of publication: name of publisher, date) page

Example: Lever, WR: *Histopathology of the skin, 4th Ed.*, Philadelphia, J. B. Lippincott Co., 1967, p. 570.

and for published articles:

Author, title, journal, volume number and inclusive pagination, year

Example: Parnell, FW, Brandenburgh, JH: Vocal cord paralysis; a review of 100 cases. *Laryngoscope* 80:1036-1045, 1970

Example: Ashford, TP, et al: The role of the endothelium in the initial phases of thrombosis. *Am J Pathol* 50:257-287, 1967

Note: No punctuation separates the journal title from the volume, and no period is used at the end. A general rule regarding the listing of joint authors is to spell out the names of all authors unless there are more than three (*Stylebook/Editorial Manual of the AMA* 15.08), in which case, the name of the first three authors are spelled out followed by “et al”.¹⁴

COMMENTS

In conclusion, medical literature is written to communicate; it is intended to influence the reader and inspire the author. The style of a medical manuscript (whether it is a “case report” or a “primary article”) is appraised by the editor or his staff before it is accepted for publication. Review by the editorial staff protects the author; it allows for criticism and direction; it also serves as a screening device for the editor.

Even though the physician-author's knowledge of subject material is prerequisite for his reporting, the standard medical reference books will be of invaluable aid in the mechanical drafting of his or her manuscript.

Selected Reference List for Medical Authors

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News From The Oklahoma State Department of Health

State Department of Health Otolaryngology Clinics

The Otolaryngology Clinic Program of the State Department of Health began five (5) years ago as a pilot project at the Region V Child Guidance Center in Shawnee, Oklahoma. As a result of community acceptance of this program, similar clinics are now operative in Regional Guidance Centers in Lawton, Muskogee, Stillwater, Ada, Okmulgee, and Enid. Each Regional Center serves the counties within its catchment area.

The Otolaryngology Clinics provide for preliminary medical evaluation by private ear,

nose, and throat specialists for children and adults suspected of having ENT problems. The services, which include medical and audiological testing as well as impedance audiometric evaluation, provide for complete follow-up on each case needing treatment. Direct referrals are made for surgery and/or hospitalization and for hearing habilitation such as hearing aid evaluation and fitting.

Children and adults may be referred from guidance centers, local providers, and schools to health department OTL Clinics which also function as back-up for statewide hearing screening programs of the local health departments. Patient priorities are for low-income families, but in areas where ENT resources are scarce, patients are billed on a sliding scale based on their ability to pay. The clinics function primarily to reach those families who would not otherwise receive or have this highly specialized service available or accessible.

Similar clinics in other areas are planned in the near future in order to establish a Statewide system providing these specialized services. □

Communicable Diseases in Oklahoma for May, 1977

DISEASE	May 1977	May 1976	April 1977	Total To Date	
				1977	1976
Amebiasis	3	2	4	9	4
Brucellosis	1	—	—	1	2
Chickenpox	112	267	169	844	1424
Encephalitis, Infectious	1	5	3	6	10
Gonorrhea (Use Form ODH-228)	1043	847	1014	5166	5126
Hepatitis, A, B, Unspecified	48	109	66	337	740
Leptospirosis	—	—	—	—	—
Malaria	—	—	—	—	—
Meningococcal Infections	1	1	1	6	18
Meningitis, Aseptic	1	1	6	11	9
Mumps	59	123	74	412	599
Rabies in Animals	21	23	47	144	64
Rheumatic Fever	—	2	—	1	6
Rocky-Mountain Spotted Fever	15	13	—	25	17
Rubella	3	7	9	26	47
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	4	53	16	50	266
Salmonellosis	36	17	1	58	62
Shigellosis	3	28	1	17	128
Syphilis, Infectious (Use Form ODH-228)	7	9	6	48	34
Tetanus	—	—	—	—	—
Tuberculosis, New Active	22	22	32	128	143
Tularemia	—	5	—	1	5
Typhoid Fever	—	—	—	—	—
Whooping Cough	—	—	1	2	1

OSMA Annual Meeting in Brief

A plan calling for an expanded Grievance Committee which would have more time to investigate patient complaints was unanimously adopted at the OSMA annual meeting in May. The proposal was made by OSMA immediate Past-President, Doctor Orange M. Welborn, Ada, and calls for the present Grievance Committee to be enlarged from 5 to 9 members on a one-year basis.

The enlarged panel, which will go into effect immediately, will serve as an advisory board to the Oklahoma Board of Medical Examiners. Currently the examining board is the only body in the state which has the authority to suspend or revoke a physician's license.

Doctor Welborn told the press that the reason he proposed the new panel was "I have become increasingly alarmed at the inability of the organized medical community to aid and discipline errant physicians." He said the new panel will hopefully "provide an effective avenue by which doctors can police themselves and attack problems on a small scale before they lead to malpractice allegations."

The OSMA House of Delegates also approved a plan of continuing medical education for all OSMA members. The OSMA plan has been in the planning stages for over a year now and has received many hours of consideration by the Council on Medical Education. It calls for the CME program in Oklahoma to be patterned after the American Medical Association's Physicians Recognition Award and will require that all OSMA members have an active AMA PRA award by January 1st, 1981. Enrollment in the program will begin January 1st, 1978, as the AMA PRA requires at least 150 hours of continuing medical education over a three-year period. Of those 150 hours at least 60 must come from Category I, which is the most closely controlled.

The OSMA Council on Medical Education has received provisional approval to survey Oklahoma hospitals and institutions wishing to conduct accredited continuing medical education. Although the OSMA survey team will not have final authority in determining whether an institution is accredited or non-accredited, it will be able to make recommendations to the AMA.

The surveying process will begin in the near future.

In other actions, the OSMA House of Delegates also:

*Approved a group of resolutions for submission to the American Medical Association. These resolutions called for the Council on the Medical Aspects of Sports to be reinstated, the AMA to do everything possible to prevent further release of Medicare/Medicaid reimbursement lists and also called upon the AMA to step up its public relations/public education activities.

*Approved a Tulsa County Medical Society resolution requesting the regents of the University of Oklahoma to name the new OUHSC library building after the late Doctor Robert M. Bird. Doctor Bird once served as Dean of the OU College of Medicine. This resolution was sent to Oklahoma Governor David L. Boren, who responded, "I agree with you completely that the library could be named after no finer person than Doctor Robert Bird."

*Approved an ambitious public relations program which calls for the production of television public service announcements, audiovisual presentations, membership brochures, continuation of the medical update series for doctors' waiting rooms, continuation of the Ask A Doctor series on educational television, and increased emphasis on the *OSMA Journal* news section.

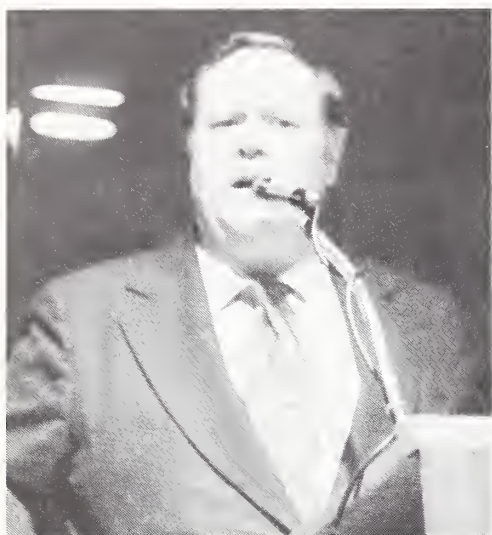
*Approved a resolution calling on OSMA members to inform the public of the ineffectiveness of Laetrile and of the dangerous precedent that legalization of Laetrile would have on a "medically vulnerable group of patients." Also approved was a resolution from the OSMA Council on Public and Mental Health which encourages OSMA members to refrain from participating in any weight control program that utilizes human chorionic gonadotropin (HCG) as the principal weight reducing agent.

*Officially went on record as approving the Oklahoma Industrial Recreation and Fitness Council and encouraged business and industry leaders to establish better recreation and fitness programs for executives and employees.

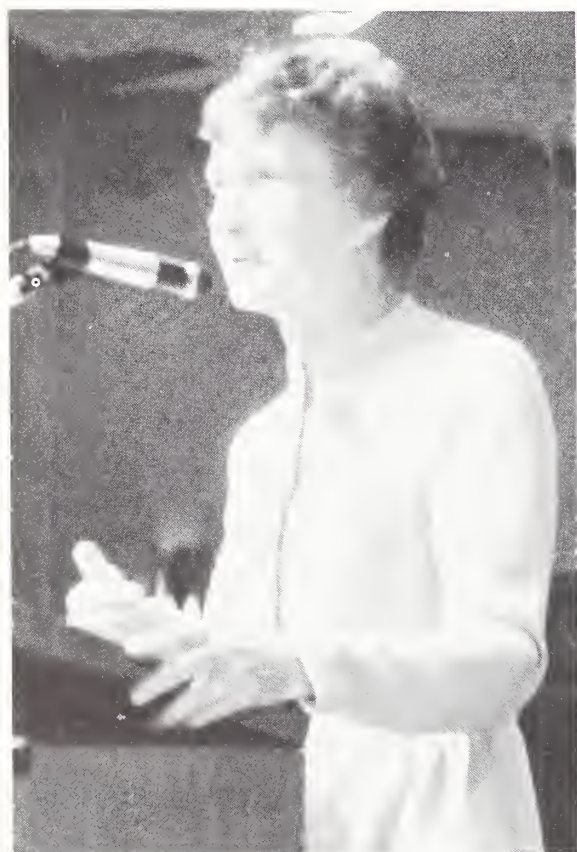
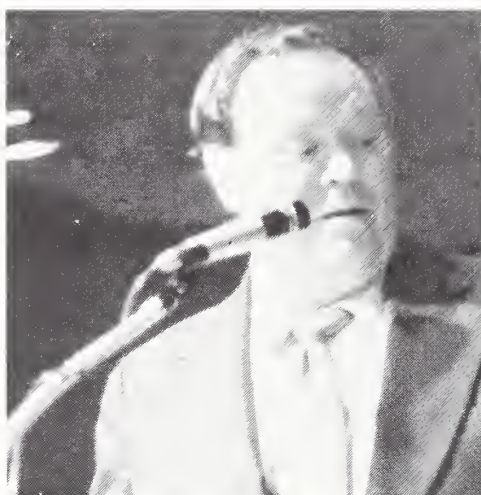
*Approved a resolution authorizing the president of the OSMA to appoint a special task force to study the feasibility of establishing a regionalized perinatal care program with in-

(Continued on page 276)

Summit in Review



Summit guest speaker, James Boren, uses all his resources, including oration, pontification and gestures to describe the growing bureaucracy in Washington.



Oklahoma City Mayor, Patience Latting, was a guest speaker on the same program with Boren. Mayor Latting welcomed the state's doctors to Oklahoma City but chose not to discuss governmental philosophy with the other guest speaker.

Most Summit meetings were busy and active . . . this one is no exception.





Doctor Larry Long (l) Summit scientific chairman, and Doctor William Reiff (r), exhibits chairman, are obviously pleased with Oklahoma Medical Summit '77.



Summit speaker, Frosty Troy, challenges doctors to get involved.



Mrs. James L. Haddock and Doctor Orange M. Welborn seem pleased to be giving up their awesome responsibilities. Mrs. Haddock was President of the OSMA Auxiliary during 1976-77, and Doctor Welborn was OSMA President during that same period.

The OSMA was honored to have Doctor Tom E. Nesbitt, Tennessee, as a special guest speaker during the OSMA annual meeting. Doctor Nesbitt, a former speaker of the AMA House of Delegates, was elected last month as President-elect of the AMA.



A crowd was on hand for all Summit social functions.



(Continued from page 273)
structions that a report be filed at the 1978 OSMA annual meeting.

*Authorized employment of a part-time legislative representative in Washington, DC to represent the interests of Oklahoma physicians.

*Approved a series of health forums to be held in cooperation with Oklahoma congressmen.

*Approved a recommendation that the OSMA continue to support the Oklahoma Council for Health Careers. This organization performs many services in the health field including physician placement.

*Approved a recommendation that the Council on Members Services continue to study the viability of organizing a captive insurance program for professional liability coverage. The House also authorized the Council to establish such a company if traditional insuring mechanisms become unavailable or if the rates escalate beyond reasonable limits.

*Encouraged the Council on Members Services and the Council on Professional and Public Relations to jointly embark upon an active recruitment program to encourage non-OSMA members to join.

*Approved a resolution strongly opposing any state legislation which would restrict the administration of electro-convulsive therapy and psychotropic drugs beyond the recognized traditional tests for safety and efficacy.

*Authorized the appointment and implementation of an OSMA Committee on Environmental Quality to investigate the environmental aspects of health care in the state and to advise the OSMA on issues of public concern.

A full report on all of the action of the OSMA annual meeting may be found in the Proceedings Section of this issue of *The Journal*. □

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New Officers and Trustees Named

Shown in the center of the picture below are the new President and the Immediate Past-President of the Oklahoma State Medical Association. Doctor Orange M. Welborn, Ada, (center right), is shown handing the gavel signifying the OSMA presidency to Doctor C. S. Lewis, Jr., Tulsa, (center left). Doctor Lewis was installed during the OSMA meeting in May. To the right of Doctor Welborn is Doctor Howard Mauldin, the newly installed President of the Oklahoma City Clinical Society. To the left of Doctor Lewis is Doctor Sam Wheeler, the new President of the Oklahoma Academy of Family Physicians.



The photograph was taken at the May 4th-7th meeting of Oklahoma Summit '77 during which the three new Presidents were inaugurated. The three associations are the sponsors of Oklahoma Medical Summit.

Other OSMA officers elected at the annual meeting are Doctor Marvin Margo, Oklahoma City, President-elect; Doctor M. Joe Crowthwait, Midwest City, Vice-President; Doctor Armond Start, Oklahoma City, Secretary-Treasurer; Doctor James B. Eskridge, III, Oklahoma City, Chairman of the Board of Trustees; and Doctor Frank Clark, Ardmore, Vice-Chairman of the Board of Trustees. Doctor Ed L. Calhoon, Beaver, was re-elected as one of the three delegates to the American Medical Association, and Doctor M. Joe Crowthwait was re-elected as an alternate delegate. Other OSMA delegates to the AMA are Doctor Scott Hendren, Oklahoma City, and Doctor Harlan Thomas, Tulsa. Other alternate delegates are Doctor Rex Kenyon, Oklahoma City, and Doctor Orange M. Welborn, Ada. Doctor S. N. Stone, Oklahoma City, and Doctor Jack Fetzer, Woodward, are the Speaker and Vice-Speaker of the OSMA House of Delegates. □

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The Oklahoma Cancer Center— “Center Without Walls”

Jack L. Whenry, EdD, Frank
McGregor, MD, Arthur Hoge, MD

A National Cancer Institute grant was awarded with a starting date of July 1st, 1976, which authorized establishment of the Oklahoma Cancer Center. The funding accompanying this grant was sufficient to recruit a small administrative staff to work with health professionals in Oklahoma to assist in development of the Oklahoma Cancer Program. This Cancer Center grant was the result of planning efforts as previously reviewed.

To meet special problems of providing quality cancer care to Oklahomans and to prevent needless deaths from this disease, David L. Boren, Governor of Oklahoma, has established an Oklahoma State Cancer Plan to involve all Oklahoma health care institutions and health professionals in this organized program of cancer research, education and control. The Oklahoma Cancer Center will implement the goals of the Oklahoma State Cancer Plan and is supported by more than 30 institutions in the state.

The National Cancer Institute has designated two types of cancer centers: comprehensive and specialized. The comprehensive cancer centers are centers which conduct long-term multidisciplinary programs. Specialized Cancer Centers conduct long-range multidisciplinary programs in one or more of the areas required of comprehensive cancer centers. Presently there are 19 comprehensive centers and 47 specialized centers within the United States. The Oklahoma Cancer Center probably falls somewhere between these two categories at the present time.

The “Center-Without-Walls” concept was endorsed by the Oklahoma Cancer Center staff following a 1972 survey of Oklahoma hospitals and physicians. This survey revealed sufficient beds in Oklahoma to adequately care for cancer patients. For this reason, there is no immediate necessity to build a large cancer hospital and we hope to fully utilize the beds presently available. The Oklahoma hospitals and physicians will be surveyed again in 1977.

The primary goal of the Oklahoma Cancer Center is the development of an effective multidisciplinary/multiprofessional cancer

center for the State of Oklahoma. The Oklahoma Cancer Center is open to all qualified institutions, organizations and individuals within the state.

The advantages of the citizens of Oklahoma of a fully operational cancer control program will be: earlier diagnosis and quality care for cancer patients throughout the state. Communication between all sectors of the professional components will be an important aspect of improving overall management of cancer patients. Time delay of important research findings to clinical utilization should be shortened as much as two-three years.

For the Oklahoma Cancer Center or any other center to be designated a comprehensive Cancer Center, the sponsoring and participating institutions must address the following areas:

1. The center must have a stated purpose that includes carrying out of basic and clinical research, training, and demonstration of advanced diagnostic and treatment methods relating to cancer.

2. The center must have teams with high quality interdisciplinary capability in the performance of diagnosis and treatment of malignant diseases.

3. The center must have an environment of excellence in basic science which will assure the highest quality of research.

4. The center should have or should develop an organized detection program.

5. The center must maintain a statistical base for evaluation of the results of its program activities. For this purpose, records should be developed which will standardize disease classification to enable exchange of information between institutions.

6. The center should provide leadership in developing community programs involving active participation by members of the medical profession practicing within the area served by the center.

7. The center must have a strong research base (fundamental and applied) and related training programs, with an organizational structure which will provide for the coordination of these activities with other facets of the center program.

8. The center will participate in the National Cancer Program by integrating its efforts with the activities of other centers in an integrated nationwide system for the prevention, diagnosis and treatment of cancer. For this pur-

pose, the center must have sufficient autonomy to facilitate this function.

9. The center must have an administrative structure that will assure maximum efficiency of operation and sound financial practices. The administration should include responsibility for program planning, monitoring, and execution as well as preparation of the budget and control of expenditures. Administration and management would include staff appointment and space allocation, the intent being that such a center will have the authority to establish the necessary administrative and management procedures for carrying out its total responsibility as defined in the criteria.

10. In order to give the program cohesion and identification, it is a requirement that each center identify an appropriate number of cancer center beds for interdisciplinary clinical research and treatment of inpatients. In general, it is expected that these will be grouped and that existing inpatient facilities will be committed for this purpose.

11. The center must provide evidence that it has the resources and plans for assisting in effectively communicating the results of research and demonstration activities to practitioners, particularly in its community.

12. The center must provide assurance that, where applicable, it will coordinate its efforts with other clinical research, training, and demonstration programs in the community relevant to cancer research, including coordination through the Health Systems Agency.

In 1976 the Oklahoma Cancer Center Advisory Committee, which is composed of the Chief Executive Officer of each sponsoring institution, Dean of all participating colleges, President of the Oklahoma Division of the American Cancer Society and the Commissioner of Health - State Department of Health was formed. This committee initially met January 16th, 1976, and again on February 2nd, 1977. By-laws for the Oklahoma Cancer Center adopted at the February 2nd, 1977, meeting changed the title of this committee to the Board of Institutional Advisers.

Members of this Board are: William E. Brown, DDS, Dean, College of Dentistry, University of Oklahoma Health Sciences Center (OUHSC), Oklahoma City; Sister Mary Colletta, RSM, President, Mercy Health Center, Oklahoma City; Mr. Phil Goodwin, Associate Administrator, Hillcrest Medical Center; Sister M. Therese Gottschalk, Administrator, St.

John's Hospital, Tulsa; Mr. James Harvey, Administrator, Hillcrest Medical Center, Tulsa; Mr. James J. Henry, President, Baptist Medical Center, Oklahoma City; Thomas N. Lynn, Jr., MD, Dean, College of Medicine, OUHSC, Oklahoma City; C. S. Lewis, MD, Medical Director, St. John's Hospital, Tulsa, President, Oklahoma State Medical Association; Frank McGregor, MD, Vice-President, Medical Affairs, Baptist Medical Center; Patrick Morgan, DVM, Chief of Preventive Medicine, State Health Department, Oklahoma City; Mr. Richard Mooney, Administrator, St. Anthony Hospital, Oklahoma City; Mr. Harry Neer, President, Presbyterian Hospital, Oklahoma City; Mr. Robert Morris, Director, Veterans Administration Hospital, Oklahoma City; Mr. Bruce Perry, Executive Director, University Hospital, Oklahoma City; Mr. Jon Pirtle, Administrator, Oklahoma Osteopathic Hospital, Tulsa; Ira Pollock, MD, Chief of Staff, Mercy Medical Center; Mr. Lloyd Rader, Director, Department of Institutions, Social and Rehabilitative Services, Oklahoma City; Gloria Smith, MPH, Dean, College of Nursing, OUHSC, Oklahoma City; Philip E. Smith, ScD, Dean, College of Health, OUHSC, Oklahoma City; John R. Sokatch, PhD, Dean, Graduate College, OUHSC, Oklahoma City; Mr. Mike Stephens, Associate Administrator, St. Anthony Hospital, Oklahoma City; William G. Thurman, MD, Provost, OUHSC, Oklahoma City; Mr. Dan Tipton, Administrator, South Community Hospital, Oklahoma City; Robert Tompkins, MD, Medical Director, Saint Francis Hospital, Tulsa; Mr. Lloyd J. Verrett, Associate Administrator, Saint Francis Hospital, Tulsa; and Clayton S. White, MD, President, Oklahoma Medical Research Foundation, Oklahoma City.

Last month Governor David L. Boren issued a statement supporting the Oklahoma Cancer Center and the Oklahoma Cancer Hospital Network. Governor Boren was instrumental in the formation of these organizations and originally called a meeting in mid-1975, during which the hospital network and a state tumor registry were planned. To implement these recommendations, an Oklahoma Cancer Control development grant was submitted to the National Cancer Institute in fall of 1976. This was a consortium grant submitted by the Oklahoma division of the American Cancer Society and the Oklahoma Cancer Center. This grant emphasizes the development and ad-

ministration of the Oklahoma Cancer Hospital Network which will support a communications system, as well as the state tumor registry.

The Oklahoma Cancer Hospital Network will include such things as early detection programs, education and consultative efforts and formation of a structure to allow for effective communication and data collection.

The following is the statement released by Governor Boren in support of the Oklahoma Cancer Center and the Oklahoma Hospital Network. □

Statement on Oklahoma Cancer Center, Office of the Governor

As Governor of the State of Oklahoma, I consider one of my primary responsibilities the health and welfare of the citizens of our State. During the past two and a half years, I have encouraged and participated in the planning and development of the Oklahoma Cancer Center. My office has worked closely with the members of the Oklahoma Cancer Center and has been involved in cooperative planning which has taken place with the professional societies of this state; the Oklahoma Division of the American Cancer Society, Oklahoma University of Health Sciences Center, and individuals of leadership within the professional community. In the summer of 1975 I called a statewide planning meeting which was held in Shawnee. This meeting resulted in the Oklahoma Cancer Center planning a Cancer Hospital Network. My office was further involved in the Cancer Center core grant site visit which resulted in official recognition by Washington, DC, of the existence of the Oklahoma Cancer Center. Today I am proud to announce the formation of the Oklahoma Cancer Center, Inc.

This non-profit corporation is an outgrowth of these activities. The formation of the Oklahoma Cancer Center, Inc. will allow more than 30 hospitals throughout the State of Oklahoma to join in a unified effort to offer optimal care to Oklahomans throughout the State. The Oklahoma Cancer Center, Inc. is a "center-without-walls" and consists of a consortium of institutions in a statewide network to cooperate in the development of a program which will assure optimal care for Oklahomans who develop cancer.

It is an unfortunate reality that approximately 8,700 citizens of our State developed cancer in the year 1976. Many of these people

will be cured of their cancer. However, for others, the disease will be fatal. A new component within the Oklahoma Cancer Center, Inc. will be the Division of Cancer Studies which will conduct research on various aspects of cancer. This division, in collaboration with a national effort, will help accelerate the day when all cancer patients can be cured.

In the future, a statewide communications network will be formed and this will allow the transmission of research findings to practicing physicians throughout the State. So that cancer patients will not be lost to follow-up, due to relocation, a statewide tumor registry will also be developed which will also aid in determining if clusters of cancer exist within our State. These cancer clusters, when identified, would alert health officials to investigate the probable cause.

I am pleased to learn that new drugs are constantly being developed for the treatment of cancer. Some of these drugs not now commercially available, however, can be obtained through the Oklahoma Cancer Center, Inc. to practicing physicians throughout the State at no cost to the patient or the physician. Professional continuing education as well as patient education will also be coordinated through the Oklahoma Cancer Center, Inc. Patients will be taught the early warning signs of cancer in programs coordinated with or through the Oklahoma Division of the American Cancer Society. While cancer is one of the leading causes of death of our citizens, I am confident that further development of programs throughout the State coordinated through the Oklahoma Cancer Center, Inc., the Oklahoma Division of the American Cancer Society, professional organizations, etc. can increase the number of patients cured as well as offer optimal care and support to those individuals who cannot now be cured. Programs for earlier detection of cancer and wherever possible, the prevention of cancer, will also be developed.

My office is proud to be a part of this program. □

David L. Boren
Governor of Oklahoma

ERRATUM

The position of two of the 1977-78 OSMA Auxiliary officers were listed incorrectly in the May, 1977, issue of *The Journal*. Mrs. Chester L. Bynum is secretary of the group and Mrs. John T. Forsythe is 1st Vice-President. *The Journal* regrets this error. □

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DEATHS

RALPH L. ROYSTER, MD
1905-1977

A Purcell general practitioner since 1931, Ralph L. Royster, MD, died in Oklahoma City June 5th, 1977. A native of Wanette, Oklahoma, Doctor Royster was graduated from the University of Oklahoma College of Medicine in 1930. Following his internship, he established his practice in Purcell where he remained active until last year.

WILLIAM F. CARLILE, MD
1931-1977

Oklahoma City obstetrician-gynecologist, William F. Carlile, MD, 45, died May 20th, 1977. Born in Ardmore, Oklahoma, Doctor Carlile served with the US Navy and Marine Corps before graduating from the University of Oklahoma College of Medicine in 1961. He had practiced in Stillwater and Tulsa before moving to Oklahoma City. □

**What's Up? Medical Bills . . .
And Everything Else**

What's up? Well, Medical care prices are up — that's for sure. Medical care was at 184.7 on the Consumer Price Index in 1976. (1967=100) Some people even say that medical care is the fastest rising item in the CPI.

But that's not true, says the American Medical Association. Many important items on the CPI (and some relatively trivial ones, too) are rising as fast as medical care — or even faster.

That includes many essential services. Lawyers' charges, for example, were at 199.9 on the 1976 CPI. Insurance and finance charges were at 196.6. Postal charges were at 222.3.

Most services pertaining to everyday living are up: having your living room or dining room repainted (225.6), having the house roof reshingled (233.4), having a sink replaced (210.2), having the furnace repaired (207.1), having the washing machine repaired (200.4), repairs of the family auto (189.7), services of a baby sitter for the evening (214.6).

Speaking of baby sitters and babies, the price of diapers registered 190.2 on the CPI

while blue jeans were slightly behind at 190.0.

Coffee breaks and other between-meal snacks have also made impressive price rises: coffee was at 243.6, sugar at 201.3, evaporated milk at 204.8. Cinnamon rolls were at 195.9.

For the youngsters' snacks, the price of a cola drink was at 194.2, chocolate bars were at 233.5, cookies were at 189.6. The price of taking the kids to the movies, incidentally, hit 193.8 on the CPI.

The dinner table was affected by higher prices: Potatoes (200.1), rib roast (188.4), whole ham (199.6), seafood (227.3). Bacon for breakfast was at 210.4, sausage at 226.6. American cheese, popular in lunch boxes and picnics, was at 198.6.

Prices of household utilities were up: heating fuel oil or coal (250.8), gas (200.9), residential water and sewerage services (188.7).

Prices of many of the amenities of life have risen: toilet soap (193.5), women's haircuts (186.6), china dinnerware (190.6).

Bathroom tissue was at 234.4.

Of course, prices aren't the only things that have gone up. Incomes have risen, too. Per

capita income after taxes has more than doubled since 1967, for an index of 202.0 in 1976.

And Social Security taxes have risen faster than either consumer prices or incomes. An index for the maximum Social Security tax on employees (if the government published one) would have been 308.2 in 1976 (1967=100). For 1977 the maximum Social Security tax index would be 332.4. □

Doctor Lewis Honored by Training Commission

C. S. Lewis, Jr., MD, was honored as the incoming President of the Oklahoma State Medical Association by the Physician Manpower Training Commission during the commission's May meeting in Tulsa. Fred Cormack, chairman of the commission, cited Doctor Lewis for his many contributions to medical education and health affairs in Oklahoma.

Doctor Lewis has served as a member of the commission since his appointment by Governor Boren in 1975. The seven-man commission was created by the Oklahoma Legislature to administer medical education scholarship-loans



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and residency cost-sharing programs aimed at increasing the number of primary-care practitioners serving rural areas of the state. Doctor Lewis was recognized by his fellow commissioners for his active role in developing commission programs and for his leadership in OSMA affairs.

Serving with Doctor Lewis and Chairman Cormack are Jack W. Parrish, MD, of Seminole; Billy D. Dotter, MD, of Okeene; J. Scott Hickerson, DO, of Cleveland; John D. McCuistion, DO, of Madill; and Olen D. Berong, of Clinton. Terry R. Boucher is the Commission's Executive Director. □

Class of '27 Holds Reunion

The 1927 graduating class of the University of Oklahoma College of Medicine held their 50-year reunion on June 12th, 1977, in Oklahoma City. Out of the class of 42 graduates, 16 are now living and 10 attended the reunion.

In addition to the class members who attended were Doctor and Mrs. Mark R. Everett and Doctor and Mrs. Thomas N. Lynn. Doctor Lynn, Dean of the OU College of Medicine presented 50-year certificates to the members of the class.



Pictured above (top row, l to r) are Clifford W. Moore, MD, Gilbert L. Hyroop, MD, G. LeRoy Goodman, MD, Hervey A. Foerster, MD, and Wesley R. Mote, MD. In the bottom row (l to r) are Harry Wilkins, MD, Fannie Lou Leney, MD, Leslie LeHew, MD, and John B. Miles, MD. Those not attending were Henry W. Harris, MD, Cecil Baird, MD, Juan Gonzales, MD, Alexandro Baltazar, MD, Bertha Baltazar, MD, Mary Hamilton, MD, and Ira Bond, MD. □

Doctor Fees May Need Controls Says HEW Secretary Califano

Testifying recently before the Subcommittee on Health of the Senate Finance Committee, Health, Education, and Welfare Secretary Joseph A. Califano, Jr., stated that physician fees, like hospital costs, eventually may need cost controls. "Eventually the health care system will have to deal with physician's fees." The Secretary stated that he and President Carter had considered controls on physician's fees earlier this year but rejected them ". . . because we just don't know yet how to deal with that problem." He promised that he would send a specific recommendation to the Congress on the matter of physician's fees.

Secretary Califano was the Administration witness as Senator Herman Talmadge (D-Ga.) opened a series of hearings on his bill, S. 1470, "Medicare-Medicaid Administrative and Reimbursement Reform Act." In his opening statement on the HEW reorganization, Senator Talmadge called it "another good idea bogged down in the quagmire of bureaucratic self-interest." "It may well be necessary for us to specifically legislate the organization and staffing of the Health Care Financing Administration," said Talmadge.

In his testimony on S. 1470, Secretary Califano called the prospective reimbursement system which the bill would apply to Medicare and Medicaid reimbursement superior to the current retrospective reimbursement system. He suggested, however, that since S. 1470 only applies to Medicare and Medicaid reimbursement that hospitals may refuse these patients as a means of avoiding cost controls. Califano also said that the bill was deficient in that it does not cover all hospital costs such as energy and the education and training of medical personnel. He expressed reservations over the need to write reimbursement classifications into the bill and noted that HEW was currently lacking sufficient data to ascertain the reasonableness of many health care costs, but that such data was being developed.

The Secretary was supportive of the section of the bill which would require pathologists, radiologists and anesthesiologists to work on a fee-for-service rather than a percentage basis. The Secretary opposed a provision in the bill which would bar disclosure of payments made by physicians made under the Medicare and Medicaid programs. "Sunshine is the best cure

for abuses in these programs," stated Califano. Senator Talmadge commented that he would agree to delete that provision from the bill if Mr. Califano would "guarantee the accuracy of any lists going out."

Raymond T. Holden, MD, chairman of the AMA Board of Trustees, and Edgar T. Beddingfield, Jr., MD, chairman of the Council on Legislation, appeared before the Subcommittee to offer the AMA's views on S. 1470. Doctor Holden noted that "notwithstanding our belief that S. 1470 is a more realistic program, we do also believe that adoption of the program in the manner presently proposed could have uncertain and perhaps even undesirable effects." He urged that the hospital cost control plan be tried on an experimental basis first. He concluded his remarks by stating that while neither the AMA, nor anyone else, has all the answers to health care problems, the AMA is actively seeking a solution through its National Commission on the Costs of Medical Care.

Continuing the AMA statement, Doctor Beddingfield discussed the proposal to increase physician acceptance of assignments, stating that "... it does not reach the issue of why assignments are not widely accepted ... Increasing the acceptance of assignments can only be achieved by raising the level of reimbursement to reflect accurately the costs of the service provided." He expressed concern that the proposals to encourage acceptance of assignment combined with further restrictions in the reimbursement for physicians could "lead to a reduction in the availability of care to the intended beneficiaries."

Strong objections were also lodged against the redefinition of physicians' services under Medicare under which only certain limited patient care services would be reimbursed instead of all physician's services. Doctor Beddingfield pointed out that this change would allow HEW to define medical practice. He urged that the provision be deleted.

Doctor Beddingfield concluded by noting that the thrust of S. 1470 is "cost control through curtailment of reimbursement. We again remind the Committee that a lowering of reimbursement levels represents cost savings only to the government. The actual cost of services does not change, and the difference between actual cost and reimbursed cost usually

is made up by higher prices on services to non-government patients or an increased cost to the program beneficiary." □

Miscellaneous Advertisements

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(Continued from page 251)

oncogens is usually a most effective means of tumor induction.

Conclusion: There is no doubt that the spectacular results in the treatment of breast cancer reported by Fisher and later by Bonadonna show that the preliminary 12-month, and 18-month results are extremely promising. We know the long-term suppressive effects of chemotherapy provide a means of controlling even gross metastatic cancer for a number of years in large groups of patients. It is not unreasonable to expect this same intensive chemotherapy to control microscopic disease for an even longer period of time. It should be pointed out however, that there are only anecdotal cases reported of patients who have been "cured" of metastatic cancer of the breast with any form of chemotherapeutic agents. Eventually these patients relapse and their tumor becomes completely refractory to the suppressive effect of the chemotherapy and ultimately recurrence of the cancer and a rapid demise of the patient must follow. It may be that the utilization of combination chemotherapeutic agents in the immediate postoperative period will prevent this ultimate recurrence of the tumor for a number of years. It may even be possible for chemotherapy to suppress permanently micro-metastases in these patients. However, it is unreasonable to expect chemotherapy also to curatively control macroscopic disease left behind in lymph nodes and on the patient's chest wall.

Radiation therapy continues to play a very important role in the treatment of many patients with breast cancer. The final answer is still not in evidence in any of the studies that have been published yet. For many years radiation therapy has been proved to be an effective form of local treatment for inoperable, advanced, or inflammatory carcinoma of the breast.

In the end it will be proved that it is not a question of either radiation therapy or chemotherapy, but a combination of both of these important modalities following an appropriate form of surgery that will ultimately lead to the final answer for control of cancer of the breast.

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P.O. Box 26901, Oklahoma City, Oklahoma 73190.

Proceedings of the 71st Annual Session of the House of Delegates of the Oklahoma State Medical Association

OPENING SESSION

I. CALL TO ORDER:

The House of Delegates convened its 71st Annual Session in the Skirvin Plaza Hotel, Oklahoma City, Oklahoma, on May 4, 1977. The Speaker, S. N. Stone, MD, Oklahoma City, called the meeting to order at 3:20 p.m.

II. INVOCATION:

Charles N. Atkins, MD, Oklahoma City, delivered the invocation.

III. REPORT OF THE CREDENTIALS COMMITTEE:

The presence of a quorum was reported by Thomas Rhea, MD, Chairman, Idabel.

IV. APPOINTMENT OF COMMITTEES OF THE HOUSE:

Doctor Stone referred the Delegates to their handbooks for the appointment of the following committees to assist in the conduct of the meeting:

CREDENTIALS COMMITTEE

Thomas E. Rhea, MD, Idabel, Chairman
Edward W. Allensworth, MD, Vinita
F. W. Hollingsworth, MD, El Reno
Paul N. Vann, MD, Lawton

TELLERS

LeRoy Carpenter, MD, Spencer, Chairman
Thomas C. Glasscock, MD, Ponca City
Frank W. Clark, MD, Ardmore
Lowell N. Templer, MD, Altus

SERGEANTS-AT-ARMS

Harlan Thomas, MD, Tulsa, Chairman
Ed L. Calhoon, MD, Beaver
Scott Hendren, MD, Oklahoma City

REFERENCE COMMITTEE NO. I

(8:30 a.m.-10:00 a.m.,
Balinese Room, Skirvin Plaza Hotel)

Robert G. Perryman, MD, Tulsa, Chairman
G. Rainey Williams, MD, Oklahoma City
Edward K. Norfleet, MD, Tulsa
George B. Gathers, Jr., MD, Stillwater

Jack L. Berry, MD., Okarche
Rick Ernest, Staff
Lyle Kelsey, Staff
Kathy Musson, Staff

REFERENCE COMMITTEE NO. II

(8:30 a.m.-10:00 a.m., Crystal Room,
Skirvin Plaza Hotel)

Kenneth W. Whittington, MD, Bethany
Carl H. Guild, MD, Bartlesville
Billy Dale Dotter, MD, Okeene
John R. Christiansen, MD, Norman
William A. Matthey, MD, Lawton
Armond H. Start, MD, Oklahoma City
Richard Hess, Staff
Judy Lake, Staff

REFERENCE COMMITTEE NO. III

(8:30 a.m.-10:00 a.m., Executive Suite,
Skirvin Plaza Hotel)

Joe B. Jarman, Jr., MD, Enid, Chairman
Ed L. Calhoon, MD, Beaver
Donald R. Carter, MD, Oklahoma City
Ronald C. Elkins, MD, Oklahoma City
Joseph Salamy, MD, Tulsa
George M. Brown, MD, McAlester
Betty Lyles, Staff
Jeanette Saunders, Staff

V. INTRODUCTION OF SPECIAL GUESTS:

Tom E. Nesbitt, MD, Speaker of the AMA House of Delegates, from Nashville, Tennessee, was introduced to the OSMA House of Delegates. Doctor Stone stated that Doctor Nesbitt would be speaking to the delegates later in the program. (Other guests to be introduced later.)

VI. PRESENTATION:

Doctor M. Joe Crosthwait, Chairman of the Council on Professional and Public Relations, presented an OSMA Award for Medical Journalism to Ervin Watson. Mr. Watson writes the weekly column "Medical News" for the Oklahoma City Times. Mr. Watson expressed his appreciation to the OSMA Delegates for the award.

VII. REMARKS OF THE SPEAKER:

Doctor Stone welcomed the delegates and guests to the 71st Annual Session of the Oklahoma State Medical Association. He expressed his appreciation for each person attending.

VIII. REPORT OF THE PRESIDENT:

Doctor Orange M. Welborn presented his report and it was referred to Reference Committee No. III (A copy of the report is attached and made a part of these minutes).

IX. REPORT OF THE PRESIDENT-ELECT:

Doctor C. S. Lewis, Jr., presented his report and it was referred to Reference Committee No. III (A copy of the report is attached and made a part of these minutes).

V. INTRODUCTION OF SPECIAL GUESTS CONTINUED:

Mrs. James L. Haddock, Norman, retiring President of the Woman's Auxiliary to the Oklahoma State Medical Association was introduced and brought greetings to the OSMA House of Delegates.

Mrs. Neil B. Kimerer, incoming President of the Woman's Auxiliary to the Oklahoma State Medical Association was also introduced to the Delegates.

X. REPORT OF THE CHAIRMAN OF THE BOARD:

Doctor J. B. Eskridge, III, presented information contained in the Board of Trustees Report and the Board's Supplemental Report. (Both reports are attached and made a part of these minutes.).

XI. SECRETARY-TREASURER'S REPORT:

Doctor Haven Mankin stated that a detailed description of the Secretary-Treasurer's Report and Audit Report is included in the Delegates Handbook. (A copy of both reports is attached and made a part of these minutes).

XII. INTRODUCE TRANSCRIBING SECRETARIES:

Doctor Stone introduced Betty Lyles and Kathy Musson as the transcribing secretaries. He also introduced the entire OSMA staff as follows: David Bickham, Richard Hess, Lyle Kelsey, Rick Ernest, Louise Martin, Marilyn Housley, Suzanne Wilson, Jeanette Saunders and Judy Lake.

XIII. NOMINATIONS FOR ELECTIONS:

Doctor Stone announced the House would recess for ten minutes for all Trustee Districts VI, VII, VIII, IX and X to caucus.

XIV. NOMINATIONS:

Doctor Jack Fetzer, Vice-Speaker, declared the House open for nominations for the position of PRESIDENT-ELECT (One year term of office).

Marvin K. Margo, MD, Oklahoma City, was nominated by *John A. Blaschke, MD*, Oklahoma City.

Nominations were declared closed.

Nominations were declared open for the position of VICE-PRESIDENT (One year term of office).

M. Joe Crosthwait, MD, Midwest City, was nominated by *Tony Puckett, MD*, Oklahoma City.

Nominations were declared closed.

Nominations were declared open for the position of SECRETARY-TREASURER (Two year term of office).

Armond H. Start, MD, Oklahoma City, was nominated by *Scott Hendren, MD*, Oklahoma City.

Nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, POSITION I (Two year term of office).

Ed L. Calhoon, MD, Beaver, was nominated by *M. K. Braly, MD*, Woodward.

Nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA, POSITION I (Two year term of office).

M. Joe Crosthwait, MD, Midwest City, was nominated by *Kent Braden, MD*, Oklahoma City.

Nominations were declared closed.

Nominations were declared open for TRUSTEE AND ALTERNATE TRUSTEE for the following Trustee Districts (Three year term of office):

DISTRICT VI.

Reporting on the Caucus of representatives from District VI, the following nominations were made;

J. B. Eskridge, III, MD, Oklahoma City, and *Kent Braden, MD*, Oklahoma City, were nominated for the positions of Trustees.

Perry A. Lambird, MD, Oklahoma City and *Kenneth W. Whittington, MD*, Bethany, were nominated for the positions of Alternate Trustees.

DISTRICT VII.

James D. Brashear, MD, Norman, was nominated for the position of Trustee.

Clinton Gallaher, MD, Shawnee, was nominated for the position of Alternate Trustee.

DISTRICT VIII.

Edward K. Norfleet, MD, Tulsa, and *Duane E. Brothers, MD*, Tulsa, were nominated for the positions of Trustees.

Dave B. Lhevine, MD, Tulsa, and *George H. Kamp, MD*, Tulsa, were nominated for the positions of Alternate Trustees.

DISTRICT IX.

Burdge F. Green, MD, Stilwell, was nominated for the position of Trustee.

Wilbur K. Baker, II, MD, Muskogee, was nominated for the position of Alternate Trustee.

DISTRICT X.

Jack W. Parrish, MD, Seminole, was nominated for the position of Trustee.

Delta W. Bridges, Jr., MD, McAlester, was nominated for the position of Alternate Trustee.

XV. ADDRESS FROM TOM E. NESBITT, MD, SPEAKER, AMA HOUSE OF DELEGATES:

Doctor Tom E. Nesbitt, AMA Speaker of the House of Delegates, expressed his appreciation for being invited to attend the 71st Annual Session of the OSMA House of Delegates. Doctor Nesbitt also thanked Oklahoma for its long-standing support of the AMA and its unified membership for the past 27 years.

Doctor Nesbitt referred to current events in the AMA and expressed his desire for the AMA to be an educational and informational organization to the state associations.

XVI. INTRODUCTION OF COUNCIL AND COMMITTEE REPORTS AND RESOLUTIONS:

Doctor Stone advised the Delegates that in order to save time, a list of reports and resolutions is included in their handbooks, and an item by item introduction would not be necessary. Doctor Stone also advised the Delegates that "late resolutions" have been approved for introduction by the Board of Trustees in accordance with the Bylaws.

XVII. ANNOUNCEMENTS:

Doctor Stone announced that reference com-

mittees will begin at 8:30 a.m., Thursday morning, May 5th.

Doctor Stone also stated that an Early Bird social hour and a dinner honoring the delegates of both the Oklahoma State Medical Association, and its Woman's Auxiliary would begin at 6:30 p.m. and 7:30 p.m., respectively, in the new Sheraton-Century Hotel.

Doctor Stone announced that the Closing Session of the House will begin at 2:30 p.m., Friday afternoon, May 7th, in the Skirvin Plaza Hotel's Venetian Room, 14th floor.

XVIII. NECROLOGY REPORT:

The Vice-Speaker of the House of Delegates, Jack Fetzer, MD, read the Necrology Report. (A copy of the report is attached and made a part of these minutes).

XIX. ADJOURNMENT OF OPENING SESSION:

The Opening Session of the House of Delegates was adjourned at 5:10 p.m.

NECROLOGY REPORT 1976-77

William M. Aldredge, MD, Bartlesville
Louis R. Baker, MD, Oklahoma City
Robert M. Bird, MD, Allentown, Pennsylvania
Lloyd C. Boatright, MD, Oklahoma City
Beverly Jeanne Burdette, MD, Oklahoma City
H. Ned Burleson, MD, Prague
Virginia O. Curtin, MD, Watonga
Ross Deputy, MD, Clinton
Paul D. Erwin, MD, Oklahoma City
Powell Hays, MD, Vinita
F. Redding Hood, MD, Oklahoma City
Raymond G. Jacobs, MD, Enid
John F. Kupka, MD, Haskell
John L. LeHew, III, MD, Oklahoma City
Forrest M. Lingenfelter, MD, Oklahoma City
Frank J. Martin, MD, Ada
Rebecca H. Mason, MD, Chickasha
Ellis Moore, MD, Oklahoma City
Sam N. Musallam, MD, Oklahoma City
Paul A. Reed, MD, Oklahoma City
Marvin L. Saddoris, MD, Cleveland
Maurice J. Searle, MD, Tulsa
Stanley K. Shields, MD, Chickasha
Daniel F. Stough, Jr., MD, Phoenix, Arizona
Averill Stowell, MD, Tulsa
Aubrey E. Stowers, MD, Cordell
Clarence B. Sullivan, MD, Tulsa
H. W. Wendelken, MD, Miami
Leonard C. Williams, MD, Oklahoma City

CLOSING SESSION

I. CALL TO ORDER:

The Closing Session of the 71st Annual Meeting of the House of Delegates was called to order by the Speaker, S. N. Stone, MD, at 2:40 p.m., May 7th, 1977, in the Skirvin Plaza Hotel, Oklahoma City.

II. INVOCATION:

John A. Blaschke, MD, Oklahoma City, delivered the invocation.

III. REPORT OF THE CREDENTIALS COMMITTEE:

Thomas E. Rhea, MD, Chairman of the Credentials Committee, announced a quorum present.

IV. PRESENTATIONS:

A. A Distinguished Service Award was presented to Mr. Lloyd Rader, Director of the Department of Institutions, Social and Rehabilitative Services, for his outstanding layman service to the medical profession. The presentation was made by Doctor Orange M. Welborn, OSMA President.

Mr. Rader expressed his appreciation for the award and made comments on various items of common interest between the medical profession and DHEW.

B. Doctor C. S. Lewis, Jr. presented Mrs. Orange Welborn with a gift for her dedicated efforts as First Lady during Doctor Welborn's term of office as OSMA President.

C. Doctor Orange Welborn presented a gift to Mrs. James Haddock, President of the Woman's Auxiliary to the OSMA, for her outstanding service as President.

D. AMA-ERF checks were presented to Doctor Thomas Lynn, Dean of the University of Oklahoma College of Medicine, in the amount of \$13,409.15 and \$7,909.78. Doctor Orange Welborn, OSMA President, presented the checks to Doctor Lynn.

Doctor Lynn expressed his appreciation on behalf of the OU College of Medicine to the OSMA and the Woman's Auxiliary for their continued support.

E. Doctor Ed L. Calhoon accepted the A. H. Robins Award for Community Service on behalf of John X. Blender, MD, for his outstanding physician service to his community.

F. Doctor Tom E. Nesbitt, Speaker, AMA

House of Delegates, was asked to stand for recognition.

V. REFERENCE COMMITTEE REPORTS:

All reports considered by the House of Delegates are attached and approved and made a part of these minutes.

REPORT OF REFERENCE COMMITTEE NO. I:

Presented by: Robert G. Perryman, MD, Tulsa

Mr. Speaker and Members of the House of Delegates, this is a report from Reference Committee No. I.

Item I. Report of the Council on Medical Services:

Mr. Speaker, your reference committee commends the Council on Medical Services for their efforts during the past organizational year and recommends approval of the report.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item II. Resolution No. 2:

Mr. Speaker, your reference committee considered Resolution No. 2 and recommends its submission to the American Medical Association.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried with one abstention.

Item III. Report of the Council on Members Services:

Mr. Speaker, your reference committee heard considerable discussion and a detailed explanation of the OSMA Malpractice Insurance Program from the OSMA Insurance Counselor, Mr. Rod Frates of C. L. Frates and Company. The committee would like to commend Doctor C. Alton Brown and his Council, as well as Mr. Frates, for their efforts on behalf of the members of the Association and recommends approval of the report.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item IV. Report of the Council on Governmental Activities:

Mr. Speaker, your reference committee considered the report of the Council on Governmental Activities in great detail and wishes to commend the Council and its Chairman, Perry Lambird, MD, for their efforts. Your reference committee concurs with the Council on Governmental Activities in the hiring of a Washington consultant to represent the OSMA

on Federal legislative matters, but recommends that the contract be for a period of one year at a time, and that the Council on Governmental Activities review the effectiveness of the Washington effort each year and report to the House of Delegates annually.

Mr. Speaker, your reference committee recommends approval of the Report of the Council on Governmental Activities.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item V. Special Report of the Oklahoma Utilization Review System:

Mr. Speaker, your reference committee reviewed the report of the Oklahoma Foundation for Peer Review and considered it for informational purposes. Your reference committee recommends approval of this special report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item VI. Resolution No. 4:

Mr. Speaker, your reference committee considered Resolution No. 4 and recommends its approval.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item VII. Resolution No. 5:

Mr. Speaker, your reference committee considered Resolution No. 5 and recommends its approval.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item VIII. Resolution No. 7:

Mr. Speaker, your reference committee considered Resolution No. 7 and recommends its approval.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Mr. Speaker, I move the adoption of this report as a whole. The motion was seconded and it carried.

Mr. Speaker, as Chairman of this reference committee, I would like to thank the committee members and the staff for their cooperation and work on this committee report.

Robert G. Perryman, MD, Chairman

G. Rainey Williams, MD

Edward K. Norfleet, MD

George B. Gathers, Jr., MD

Jack L. Berry, MD

Rick Ernest, Staff

Lyle Kelsey, Staff

Kathy Musson, Staff

REPORT OF REFERENCE COMMITTEE NO. II:

Presented by: Kenneth W. Whittington, MD,
Bethany, Chairman

Mr. Speaker and Members of the House of Delegates, your reference committee gave careful consideration to the items referred to it and makes the following recommendations:

Item I: Report of the Council on Professional and Public Relations:

Your reference committee gave careful consideration to the report of the Council on Professional and Public Relations and commends the Council for their efforts during the past organizational year. The committee gave special consideration to the budget requested by the Council and discussed at some length the way this program should be funded. Your reference committee feels that an aggressive public relations program is essential to the state medical association, and to its members, and recommends acceptance of the report. The Board of Trustees has already acted upon a portion of this report. \$6,500 is approved by the reference committee and an additional \$6,000 if the TV spots accomplish their purpose.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item II: Report of the Council on Public and Mental Health:

Your reference committee carefully considered the report of the Council on Public and Mental Health and its recommendations for the 1977-78 organizational year. Your reference committee endorses the programs recommended by the Council and recommends adoption of the report.

Your reference committee also considered additional ways in which the Council could be of assistance to both the Association and the Oklahoma citizenry. In that respect, your committee recommends the addition of the following:

5. It is recommended that the Oklahoma State Medical Association offer the services of its membership to assist any legislative committee investigation of health care facilities in this state. The president of the Oklahoma State Medical Association shall appoint members to assist such a committee upon request of any legislative body.

Mr. Speaker, I move adoption of this report as amended. The motion was seconded and it carried.

Item III: Report of the Council on Medical Education:

Your reference committee reviewed each of the items of the report of the Council on Medical Education and gave particular emphasis to the section dealing with continuing medical education for OSMA members. The members of the reference committee feel that it is important for the OSMA to initiate its own continuing medical education program, and it wishes to commend the Council for its efforts to improve the quality of medical education in Oklahoma. Your reference committee recommends the approval of this report with the following editorial changes:

Page 3, Lines 9, 10, 11, 12 ". . . The Council is of the opinion that any physician who is in active OSMA member should be expected to meet the OSMA membership requirements of a valid PRA by January, 1981."

Mr. Speaker, I move the adoption of this report as corrected. The motion was seconded and it carried.

Item IV: Resolution No. 3:

Mr. Speaker, your reference committee reviewed Resolution No. 3 and concurs with its intent. Your reference committee recommends the formal endorsement of this resolution by the OSMA House of Delegates and recommends that it be submitted to the American Medical Association House of Delegates meeting, June, 1977.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item V. Late Resolution No. 6:

Mr. Speaker, Reference Committee II carefully reviewed this resolution and recommends its adoption.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item VI: Late Resolution No. 8:

Your reference committee closely reviewed this resolution and feels that action such as this should be taken to inform both the membership and the public about the scientific findings regarding Human Chorionic Gonadotropin. Therefore, your reference committee recom-

mends approval of this resolution with the following editorial changes:

Title: Human "Chorionic" Gonadotropin (HCG)

Line 3 . . . Human "Chorionic" Gonadotropin (HCG)

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item VII: Late Resolution No. 9:

Your reference committee reviewed the recommendations of Late Resolution No. 9 and concurs. Your reference committee therefore endorses this resolution and recommends its approval.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item VIII: Report of the Editorial Board of The Journal of the Oklahoma State Medical Association

Mr. Speaker, your reference committee gave special consideration to the report of the Editorial Board and concurs with the recommendations it outlines. Your reference committee endorses the recommendation that more emphasis and space be given to the news section of *The Journal*, and we recommend also that meeting highlights be included in *The Journal* routinely. Your reference committee also recommends that highlights from council and committee meetings be carried as a part of *The Journal*.

Your reference committee feels that the proceedings of the OSMA Annual Meeting are an integral part of the communications process, and we encourage that they be included each year in a special section of *The Journal of the Oklahoma State Medical Association*. Your reference committee urges, therefore, that the report of the Editorial Board be approved with the following amendment:

Delete page 2, Line 20-23. "The Editorial Board recommends that the proceedings of the OSMA Annual Meeting be microfilmed rather than being included as a part of *The Journal* of the Oklahoma State Medical Association. This change in record keeping would save approximately \$1,800 a year."

Mr. Speaker, I move adoption of this portion of the report as amended. The motion was seconded and it carried.

Mr. Speaker, I move adoption of this report as a whole. The motion was seconded and it carried.

Mr. Speaker, as Chairman of this reference

committee, I would like to thank the committee members and the staff for their cooperation and work on this committee report.

Kenneth W. Whittington, MD, Chairman
Carl H. Guild, MD
Billy Dale Dotter, MD
John R. Christiansen, MD
William A. Matthey, MD
Armond H. Start, MD
Richard Hess, Staff
Judy Lake, Staff

REPORT OF REFERENCE COMMITTEE NO. III:

Presented by: Joe B. Jarman, Jr., MD, Enid, Chairman

Mr. Speaker and Members of the House of Delegates, your reference committee gave careful consideration to the items referred to it and makes the following report:

Item I: Report of the President-Elect:

Your reference committee recommends the acceptance of the Report of the President-Elect and congratulates Doctor Lewis for his fine outline of objectives for next year. The implementation of his suggestions will assure the OSMA of another outstanding year.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item II: Report of the President:

Your reference committee studied very carefully the Report of President Welborn. His statesman-like President's Report should be read by each member of the House of Delegates and we recommend its acceptance. Your reference committee commends Doctor Welborn for his dedicated efforts on behalf of the Association during the past year, and the fine service he has given to his fellow physicians.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item III: Special Report of the President:

Your reference committee concurs in Doctor Welborn's concern over the inability of the profession to adequately discipline its errant members. Your reference committee is in agreement with the concept as outlined by Doctor Welborn, however, caution should be used to prevent over-zealous investigation and hurried action against fellow members of the profession. The primary purpose of such a process should be the rehabilitation of the impaired physician back to productive medical practice. The Physician Review Panel should serve as a support and/or

supplement to the local county medical society.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item IV: Secretary-Treasurer's Report:

Mr. Speaker, your reference committee reviewed the Secretary-Treasurer's Report including the audited financial statement for the last year and budget for the coming year and recommends the approval of this report. Your reference committee also expresses its appreciation to Doctor Haven Mankin for the exemplary manner in which he acted as custodian of the Association's money. Your reference committee also recommends that a simplification of the financial report be made for a better understanding of how the funds are allocated to each of the Association's operating councils.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item V: Board of Trustees Report and Supplemental Report:

The annual report of the OSMA Board of Trustees reflects a variety of areas of interest during the past organizational year and illustrates the myriad of responsibilities of the Trustees. Your reference committee recommends the acceptance of both reports with one amendment on page 8, line 12 of the Board of Trustees Report to be read as follows:

"The Board of Trustees has recommended that the 1979 meeting of OSMA be held in Tulsa. However, the Trustees did not express an opinion as to the continuation of the Summit arrangement. Therefore, your reference committee recommends that the House of Delegates assign to the Board of Trustees the responsibility for making arrangements to decide if the 'Summit' concept is to be continued; the deadline for this decision being made prior to July 1, 1977."

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item VI: Resolution No. 1:

Your reference committee considered Resolution No. 1 and feels it is appropriate to recognize an outstanding and beloved medical educator.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item VII: Resolution No. 10:

Your reference committee considered Reso-

lution No. 10 and recommends its approval.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item VIII: Report of the Constitution and Bylaws Committee:

Your reference committee considered the Constitution and Bylaws Report and recommends its approval with the following editorial changes:

Page 5, Lines 11, 20 and 24 to read . . . Scientific Assembly.

Page 5, Line 14 to read . . . execution of the scientific programs of the Association or the participating specialty organizations, or other physician groups.

Page 6, Line 1 to read . . . The Council will, on request, work with

Page 6, Line 4 to read . . . for assisting the planning and publicity

Page 6, Line 13 to read . . . state of Oklahoma. The Dean of the

Page 6, Line 14 to read . . . Oklahoma University College of Medicine.

As edited, this section of the report will now read as follows:

"9.01 DUTIES. The Council will work, on request, with other interested medical and allied health organizations to plan and carry out scientific programs for the Association's membership. It shall be responsible for assisting the planning and publicity of such meetings, and for the planning and conduct of all related events and functions not otherwise assigned to other association councils, committees, or officers.

"9.02 APPOINTMENT.

"Notwithstanding Section 1.02, above, this council shall consist of three members appointed annually by the President. He shall designate one of the three as Chairman of the Council. In addition, each medical specialty organization recognized by the American Medical Association shall be entitled to one representative on the council for each 100 members, or part thereof in the state of Oklahoma. The Dean of the Oklahoma University College of Medicine shall be entitled to designate one person to serve on the council for each of the University's major branches (Oklahoma City and Tulsa) . . ."

Mr. Speaker, I move the adoption of this por-

tion of the report. The motion was seconded and it carried.

Item IX: Report of the Council on Planning and Development:

Your reference committee commends the Council on Planning and Development for its work during the past year and recommends its approval in accordance with the reports of Reference Committees 1 and 2.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Mr. Speaker, I move the adoption of this report as a whole. The motion was seconded and it carried.

Mr. Speaker, I would like to thank Reference Committee No. III and the OSMA staff for their cooperation and work on this committee report.

Joe B. Jarman, Jr., Chairman

George M. Brown, Jr., MD

Donald R. Carter, MD

Ronald C. Elkins, MD

Joseph Salamy, MD

Ed L. Calhoon, MD

VI. ELECTION OF OFFICERS:

The following officers were elected by acclamation:

Marvin K. Margo, MD, Oklahoma City, was elected to the office of President-Elect.

M. Joe Crosthwait, MD, Midwest City, was elected to the office of Vice-President.

Armond H. Start, MD, Oklahoma City, was elected to the office of Secretary-Treasurer.

Ed L. Calhoon, MD, Beaver, was elected to the office of AMA Delegate, Position I.

M. Joe Crosthwait, MD, Midwest City, was elected to the position of Alternate Delegate, Position I.

A motion was made to accept these appointments by acclamation. The motion was seconded and it carried.

VII. ELECTION OF TRUSTEES AND ALTERNATE TRUSTEES:

The following Trustees and Alternate Trustees were elected by acclamation:

Trustee District VI: Oklahoma County

Trustee: James B. Eskridge, III, MD, Oklahoma City, Chairman

Trustee: Kent Braden, MD, Oklahoma City
Alternate: Perry A. Lambird, MD, Oklahoma City

Alternate: Kenneth W. Whittington, MD, Bethany

Trustee District VII: Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie & McClain

Trustee: James D. Brashear, MD, Norman
Alternate: Clinton Gallaher, MD, Shawnee

Trustee District VIII: Tulsa County

Trustee: Edward K. Norfleet, MD, Tulsa

Trustee: Duane E. Brothers, MD, Tulsa

Alternate: Dave B. Lhevine, MD, Tulsa

Alternate: George H. Kamp, MD, Tulsa

Trustee District IX: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah & Wagoner

Trustee: Burdge F. Green, MD, Stilwell

Alternate: Wilbur K. Baker, II, MD, Muskogee

Trustee District X: Haskell, Hughes, Latimer, LeFlore, Pittsburg and Seminole

Trustee: Jack W. Parrish, MD, Seminole

Alternate: Delta W. Bridges, Jr., MD, McAlester

VIII. ANNOUNCEMENTS OR NEW BUSINESS:

Doctor Kenneth Whittington, President of the Oklahoma County Medical Society, brought to the attention of the delegates a bill, favored by the AMA, dealing with unionism of residency bargaining . . . HR 2222. After considerable discussion of the bill and testimony from Doctor Tom E. Nesbitt, Speaker of the AMA House of Delegates, the delegates recommended standing against this bill.

A motion was made that the OSMA House of Delegates recommend to its AMA delegates that a resolution against HR 2222 be introduced at the next AMA meeting, which will be in San Francisco in June. The motion was seconded and it carried.

IX. ADJOURNMENT:

The 71st closing session of the OSMA House of Delegates adjourned at 4:15 p.m.

Recorded by Betty Lyles

Report of the
COUNCIL ON MEDICAL SERVICES
May 4-6, 1977
(APPROVED)

INTRODUCTION:

The Council has been charged with the duties of studying, making decisions and formulating activities with respect to the provision of adequate medical care, including, but not limited to, the design or evaluation of all types of health care delivery systems, health planning, the financing of medical services and its impact on

the quality of patient care, the social aspects of health, internal peer review mechanisms, and the appraisal of all external programs which affect the cost or quality of medical care.

OSMA PEER REVIEW COMMITTEE:

The Peer Review Committee has been reorganized in an effort to make it more responsive and effective. The new guidelines were printed in the January issue of *The Oklahoma State Medical Association Journal* (copy attached). This allowed all OSMA members to be aware of the Committee's purpose, process and jurisdiction. All cases being presented to OSMA for review will be screened by the Executive Committee. Any cases that are deemed unusual in scope or cannot be decided by the Executive Committee will be referred to an advance reviewer and brought before the full committee which meets no less than once every two months. The full committee shall at that time be presented a schedule of cases with recommendations from the Executive Committee for their approval. Since the reorganization of the peer review mechanism, the committee has adjudicated 160 cases.

The Peer Review Committee of the OSMA does not function as a disciplinary body, but has an obligation to refer cases to the Association's Grievance Committee or the Board of Censors of the appropriate County Medical Society, when warranted.

Although there are no contractual arrangements between the Peer Review Committee and health insurance carriers or individual physicians, it is assumed that all parties involved with peer review will abide by the final recommendations of the committee. To date the Peer Review Committee has experienced very few challenges to its decisions.

The Committee functions primarily from inquiries by third party carriers. The Committee is concerned that the general OSMA membership may not be aware of the fact that they can originate a complaint if they feel they have been dealt with unfairly by an insurance carrier. Because of this, the Committee is currently studying ways to better educate the membership as to the real intent of the Peer Review Committee.

HEALTH SYSTEMS AGENCY:

Public Law 93-641, "The National Health Planning and Resource Development Act of 1974" was one of the most significant pieces of federal legislation passed. Because of its importance, physicians should be aware of and interested in its progress. The Oklahoma Health

Systems Agency was created under P.L. 93-641, so that state residents could work together for an improved health care system.

The Oklahoma Health Systems Agency Board of Trustees is responsible for several areas. The Agency gathers and analyzes health data and prepares a Health Systems Plan. The Health Systems Plan is a detailed statement of goals for improving the health of Oklahoma residents. These goals will address the accessibility, acceptability, continuity and quality of health services, while restraining costs. In January the Agency completed the first draft of the Plan.

The Agency must also develop an Annual Implementation Plan, which contains objectives leading to achievements of those goals, and priorities among the objectives.

The Agency is responsible for recommending approval or disapproval of applications for new health services or medical facilities projects, and must review the appropriateness of services provided by hospitals, nursing homes and other health institutions in the state.

The Oklahoma Health Systems Agency is receiving yearly grants from HEW for establishment of an Area Health Services Development Fund. This fund will be used for grants and to finance the programs needed to meet the goals of the Health Systems Plan.

The foundation of the program was laid with the creating of six Subarea Advisory Councils, which represent the geographic areas of the state. The Councils are made up of citizens representing the consumer and provider groups of the state's population.

Last July Governor Boren signed an executive order which authorized the creation of a state health coordinating council for the purpose of advising the Oklahoma Health Planning Commission. The SHCC will also review and coordinate the health systems plan and annual implementation plan, annually review the budget of the Health Systems Agency and report to the Secretary of HEW.

The Oklahoma Health Systems Agency is among the nation's leaders in numbers of medical doctors and doctors of osteopathy appointed to subarea advisory councils and state health coordinating councils. Among the members of the Board of Trustees and the State Health Coordinating Council are:

Aleece Clabes, MD
Jack Fetzer, MD
C. S. Lewis, Jr., MD
Geron Meeks, DO
George Prothro, MD
Galen Robbins, MD
Charles Smith, MD
Orange M. Welborn, MD

EMERGENCY MEDICAL SERVICES:

Emergency Medical Services, as important as they are, seem to be slow in arriving. Governor Boren is continuing to show his support for improved Emergency Medical Services in Oklahoma by his urging of the passage of Senate Bill 310 which is now pending in the State Legislature. The Bill has passed the Senate and is now in the House Committee on Public Health.

One area of EMS that has recently been implemented is the Critical Care Transfer Agreement between receiving and referring facilities. This agreement was developed to meet the requirements of Public Law 93-154, and the EMSS Act of 1976 and subsequent amendments under Public Law 94-573, the EMSS Act extension of 1976 which provide for federal grants to support implementation of comprehensive emergency medical systems throughout the United States. The drafting of the Critical Care Transfer Agreement form attached to this report was done through the joint considerations of the State Health Department, Oklahoma Hospital Association and Oklahoma State Medical Association.

It is hoped that this transfer form will help speed up the transfer of patients to better emergency medical care and at the same time allow the patient and physician an element of control. The main purpose is to fulfill the requirement to receive federal money to support Emergency Medical Services in Oklahoma.

Another area of the state's emergency medical services system that has improved significantly over the past five years is the training of a significant reservoir of emergency medical technicians. Through the Regional Medical Program and the State Health Department the Oklahoma Trauma Research Foundation, Inc. has conducted intensive statewide training programs for EMT's. A large number of physicians across the state have participated in the teaching effort and deserve recognition.

It will be from this corpus of personnel that the emergency medical services system envisioned by Governor Boren and others will eventually emerge.

COMMITTEE ON SPORTS MEDICINE:

Over the past few years there has not been a Committee on Sports Medicine at the AMA level. Sports medicine has been dealt with inside the framework of another committee. Doctor Donald L. Cooper, Chairman of the Committee on Sports Medicine for OSMA, has been very instrumental in an advisory capacity to the AMA. It is the opinion of the Council that the Committee on Sports Medicine is going to be much more active in Oklahoma this year, and the AMA should seriously consider reinstating this committee at their level. Not only is there a great interest in this country for sports, but there are several cases pending in our courts dealing with sports injuries, and one can only speculate as to how the outcome may affect doctors treating these patients.

COMMITTEE ON LABORATORY QUALITY:

For many years, the Association maintained a free standing Committee on Laboratory Quality. The objectives of the committee were to promote the participation by physicians in laboratory proficiency testing programs that would ascertain the quality of their office laboratories, techniques, personnel and equipment. In the late 1960's, Oklahoma was the national leader in physician office laboratory testing participation. A larger number of Oklahoma doctors were enrolled in the American College of Pathologists proficiency testing program than any other state in the Nation.

The CAP program endorsed by the Committee since the beginning of its activities provides blind laboratory specimen on a quarterly basis for testing. Results are computerized and analyses forwarded to the participants. In the beginning, the Laboratory Quality Committee analyzed each participating laboratory's test results and critiqued the laboratory's performance on an annual basis. These critiques are now performed by the College of Pathologists by computer and performance of each laboratory is compared to the base laboratory, and also related to the performance of other laboratories participating in the program.

It is obvious with the increasing number of federal regulations, as well as federal legislative proposals, there will be additional restraints placed on physician office laboratories. The recent Medicaid scandals resulted in a number of corrective proposals being offered — both regulations and legislation.

The Council has adopted the College of

American Pathologists Program for 1977-78 and will recommend to the physicians in the state that have office laboratories that they participate in the program. It is the Council's opinion that an established record of performance in proficiency testing may well thwart government intervention efforts.

COUNCIL FOR HEALTH CAREERS:

The Council is functioning now under the leadership of their new Executive Director, Mr. Bob Hammonds, who came here from Indiana. If the financing is procured, and it is fairly certain it will be, the Council should be able to function quite well in increasing its effectiveness in recruiting and placing of health care personnel.

RECOMMENDATIONS:

1. The new guidelines for peer review are working well and there does not seem to be a need for any changes in action or budget.

2. A system for gathering and disseminating information to the physicians on the various Councils of the Health Systems Agency is needed, therefore, the Council recommends the creation of a study committee made up of one physician from each Subarea Advisory Council. This committee will coordinate the information from each SAC meeting and see that it is distributed to all physicians and health providers involved in OHSA and OSMA members.

3. The Council recommends that OSMA take an active and formal position in support of the "Emergency Medical Services Improvement Act" pending in the legislature.

4. The Council recommends a formal resolution be drafted to the AMA for the reinstatement of the Committee on Sports Medicine on a national level.

5. That the House of Delegates endorse the American College of Pathologists' Proficiency testing program as the approved OSMA Proficiency Testing Program for office laboratories.

6. OSMA was largely responsible for the creation of the Council for Health Careers, and it is recommended that we continue to show our support by contributing \$2,000 to their 1977-78 budget.

The Council recommends that OSMA members support Governor Boren's Workmen's Compensation Bill.

8. OSMA's law firm be allowed to handle collective bargaining problems.

Respectfully Submitted,

William M. Leebron, MD,
Chairman

John A. Blaschke, MD
George M. Brown, Jr., MD
Donald L. Cooper, MD
Jack D. Fetzer, MD
Michael J. Haugh, MD
Robert R. Hillis, MD
Joseph M. James, MD
Stanley R. McCampbell, MD
Stephen Parks, MD
Tony Puckett, MD
Richard Taliaferro, MD

Amendment to the Report of the
COUNCIL ON MEDICAL SERVICES

Page 3, Line 25—Page 4, Line 7
The paragraph should be corrected to read as follows:

"The Oklahoma Health Systems Agency is among the nation's leaders in numbers of medical doctors and doctors of osteopathy appointed to the HSA Board of Trustees, the State Health Coordinating Council and the Subarea Advisory Councils. Among the members of these councils and boards are:

Steven Baldwin, DO SAC III
John Blaschke, MD SAC II
George Brown, MD SAC IV
Jessie Chandler, MD SAC III
Thomas Conklin, DO SAC IV
N. A. Cotner, MD SAC III
Ralph Cramer, Jr., MD SAC II
Jack Fetzer, MD HSA
Gerald Gustafson, MD SAC I
Henry Harnish, DO SAC VI
Mark Holcomb, MD SAC VI
C. S. Lewis, Jr., MD SHCC
Gerald McCullough, MD SAC II
Royce Means, MD SAC V
Geron Meeks, MD HSA/SHCC
Malcolm Mollison, MD SAC V
Steve Parks, MD SAC VI
Robert Perryman, MD SAC I
Myra Peters, MD SAC I
George Prothro, MD HSA
Galen Robbins, MD HSA/SHCC
George Rogers, DO SAC V
Charles Smith, MD SHCC
George Smith, MD SAC VI
William Thurman, MD SAC II
Joe Tyler, MD SAC III
John Voorhees, DO SAC II

Robert Weedn, MD SAC V
Orange Welborn, MD SAC IV, SHCC and HSA*
Claud Williams, MD SAC VI
Walter Wilson, DO SAC I
*Awaiting Confirmation to the HSA Board of Trustees"

Report of the
COUNCIL ON MEMBERS SERVICES
May 4-6, 1977
(APPROVED)

INTRODUCTION:

The Council on Members Services has the responsibility to plan and carry out services of all types that have a direct benefit to Association members and constituent medical societies. These services include Association sponsored insurance programs, travel programs, non-scientific educational sessions for county medical societies, and membership recruitment efforts, including relationships with medical students, interns and residents. The Council also has jurisdiction over the Physicians Committee, which attempts to assist and counsel members who have special problems that require confidential treatment and special peer efforts. Because of the Council's direct relationship with Association members, it maintains a close working relationship with the State Board of Medical Examiners, an area to be further explored in the coming year. It is also the Council's responsibility to monitor the Federal Trade Commission's actions regarding physician advertising and to appropriately advise the Association's leadership of actions that should be taken as a result of adverse ruling by the FTC.

In the reorganization plan approved by the House of Delegates last year, the efforts of the Medical Heritage Committee were transferred to this Council. However, since the basic thrust of the Medical Heritage Committee is to acquire, preserve and display medical history and artifacts, it is the conclusion of the Council that these activities appropriately fall within the activities of the Council on Professional and Public Relations, and a recommendation asking that these efforts be transferred to that Council is a part of this report.

The Association President has demonstrated an intense interest in the grievance and disciplinary procedures of OSMA and it is the Council's recommendation that the Delegates give special attention to the recommendations

contained in Doctor Welborn's report. The public in general, and lawmakers specifically, are requiring increased accountability of professional people and a demonstrated methodology for disciplining errant members is essential. There are specific recommendations in the Report of the Constitution and Bylaws Committee, the President's Report and the Report of the Council on Medical Services.

MALPRACTICE INSURANCE – PRIMARY COVERAGE

The primary INA program was initiated in 1967 and is one of the most successful professional liability group plans in the United States. 2,812 Oklahoma physicians are enrolled in the program paying premiums of \$2,861,517. The basic premium provides coverage of \$100,000/300,000 and is written by The Insurance Company of North America. Historically, earned premiums have been in excess of paid claims with the exception of 1974 when paid claims, outstanding reserves and incurred losses exceeded premium income by almost \$500,000. However, the plan appears to be profitable for the underwriter and it is anticipated that INA will continue with the program in 1978. The Council has already begun negotiations to establish the 1978 premium.

Representatives of the Association met with Officers of INA in Philadelphia during the winter meeting of the American Medical Association. INA Officers appeared to be satisfied with the OSMA plan and indicated that they would like to continue writing insurance for Oklahoma physicians even though they write no malpractice insurance in any other state in the nation. An improved claims-processing procedure recently implemented in the Oklahoma City Office is a further indication that INA plans to continue the Association sponsored program.

Legislative reform passed by the Oklahoma Legislature last session, which included a three-year statute of limitations and other tort reform that enhances the defense of malpractice cases, has apparently had some effect on the insurance market. For the first time in several years, there appears to be competition entering the malpractice insurance field. Our insurance counselors have indicated that the Hartford Company is interested in quoting on the program for next year.

Because of a ruling by the Insurance Commissioner's Office, the INA policy cannot

be refused to non-Association members. However, the Commissioner has agreed that certain costs are incurred by the Association in underwriting physicians who are non-members and has indicated his willingness to permit a surcharge or "underwriting charge" on those physicians who are not members of OSMA. The Council has submitted to the Executive Committee a recommendation that non-members be charged \$420 for investigation and underwriting expense. The Executive Committee approved the request and the Council is now in the process of identifying those non-members who have purchased the INA policy.

Because of the instability of the malpractice insurance market, and the lack of companies willing to write this type coverage, many state medical societies have organized captive insurance companies for the purpose of providing their members with the basic coverage. The Osteopathic Association in Oklahoma has organized such a company and the Hospital Association is likewise doing so. The Council has discussed on various occasions the propriety of organizing a company for OSMA. The Association has a stabilization fund created for INA that now approximates \$215,000. The contract with INA provides for a return of the monies in the event they are not needed to cover extreme losses suffered by the insurance company. The new three-year statute of limitations could provide for the release of the funds in the very near future; and if so, it could be used as the corpus for a captive company. However, it has been the Council's opinion that so long as the INA rates are competitive and traditional insuring sources are available to the membership, that it would not be practical to form a captive company. The Council constantly reviews the malpractice insurance situation and could at any time recommend the formation of a company if that appears to be the best avenue for the Association to follow.

MALPRACTICE INSURANCE – EXCESS LIMITS

Lloyd's of London

The Association's excess limits policy had been written by CNA for five years. In 1976, when the Council began its negotiations for the 1977 rates, it was apparent that the coverage could no longer be purchased at reasonable cost. CNA requested a 300% increase over 1975 and also wanted to change the policy from occurrence to claims made. The Council rejected the

CNA proposal and entered into a unique insuring arrangement with Lloyd's of London and the Hartford Insurance Company. It is essentially a money purchase arrangement with a minimum deposit premium that guarantees a maximum of \$3,250,000 in coverage for Oklahoma physicians. Cost of defense and claims handling would be in addition to the 3.25 million. The Council recognizes that this is a substantial departure from traditional insuring arrangements, but the amount of coverage available is ten times the aggregate excess limits losses in any year since inception of the OSMA sponsored plan. A part of the premiums paid for the excess coverage will remain in Oklahoma as a trust accumulation (approximately \$800,000 per year). In the event there are minimum losses, the Association will have substantial assets for distribution to its members, to finance Association operations or to be used as a nucleus for the creation of a captive company, should the need arise.

MALPRACTICE INSURANCE - EXCESS LIMITS

Glacier Insurance Company

The Council experienced extreme difficulty in attracting any company willing to write coverage in excess of the \$1 million limits. Not only has the domestic market collapsed or withdrawn, but so has the foreign market. Lloyd's of London had no interest nor did the major companies such as INA, CNA and Hartford. The principal reason for the disinterest was the rising number of awards exceeding basic coverages and the reserve requirements imposed by state insurance laws. After considerable effort, the Council received quotes from the Glacier Insurance Company of Missoula, Montana. Glacier is a B+ rated Fire & Casualty Company with assets in excess of \$48 million. While the company appears to have sufficient capital to underwrite the Oklahoma program, the quoted rates are exorbitant and few physicians have chosen the additional coverage. Only 11 doctors have purchased the Glacier policy. The Council continues to search for other markets and hopefully will offer new sources at the anniversary date in January. It should be pointed out that while the OSMA has the financial ability to incorporate and fund an insurance company to write basic coverages, it is not feasible, however to create an insurance company for the purpose of writing excess limits coverage. The capital

requirement for a company writing \$100/300 thousand coverage would be about \$400 per physician member of the association; capital surplus necessary for a company writing \$1 million in excess coverage would be 10 times that amount, or nearly \$4,000 per physician. There is the long range possibility that OSMA might have a residual from the stabilization fund and the Lloyd's of London Program of almost \$1 million dollars, but even if that should occur, the sum would fall considerably short of the \$8,800,000 capital requirement. However, there is the possibility that reinsurance, (spreading the risks of the excess plan) might be easier to purchase than the excess coverage, in which event it would be advantageous for OSMA to create its own insurance company. While this is not a strong possibility, it is one which the Council is investigating carefully.

EXCESS LIMITS PERSONAL UMBRELLA

United States Fire Insurance Company

In previous years, the professional liability insurance program included as a total package, coverages for primary, excess and personal liability. However, because of the difficulty in finding a market, these various kinds of insurance had to be broken out into individual components; i.e., basic, 1st layer, excess, 2nd layer, excess and personal excess limits. To offer a complete program, the Association had to promise the insurer a reasonable number of purchasers. The best plan that we could negotiate at the time was the arrangement we have with United States Fire Company. This particular component of the total insurance package was not a major concern of the Council because of the extreme difficulty in securing the basic malpractice coverage and the first layer of the excess limits. In addition, the total premiums for the personal umbrella are not significant when compared to the premiums for the other policies. We have compared the cost of the OSMA sponsored plan with premiums of other companies offering this coverage and it is obvious that the OSMA plan is not the least expensive of the group. However, in order to offer the entire package, we had to offer the OSMA members as a group. In future years, if we are not able to offer this coverage at a more competitive price, the Council will recommend that this component be deleted from the OSMA sponsored portfolio. However, in the event that action is taken, there will be a number of physicians in the state who will be unable to purchase the coverage.

OVERHEAD EXPENSE PLAN

Insuror—CNA

The Association sponsored overhead expense insurance plan has an enrollment of 153 physicians. Loss experience is relatively low, an average of 52.9% of premium income over the past three years. However, the company wishes to make some changes in the program lowering premiums for younger physicians and raising premiums for older physicians, with the net result being more than a 20% increase in premium income. Another company, Combined Insurance Company of Chicago, has agreed to underwrite the program at the same premium as has been offered in the past three years. It is our recommendation that the program be changed to Combined Insurance Company.

MAJOR MEDICAL AND LONG TERM DISABILITY

Both the major medical and the disability insurance program are underwritten by Washington National Insurance Company. The program has been in effect since 1973. The disability income portion of the program has an enrollment of 526 doctors; loss experience in 1976 was 114% of the premium income. Consequently, the company has requested a major increase in premium.

The major medical portion of the program has an enrollment of 115, which is extremely disappointing and an indication that the policy benefits are not competitive in today's market.

Because of the low enrollment in the major medical program and the premium increases requested on the disability income plan, we have requested that this program be put out to bid.

OSMA - INA STABILIZATION FUND

In 1975, OSMA entered into a trust agreement with the Insurance Company of North America to establish a stabilization fund which would have as its primary purpose to cover INA against unanticipated claims which might occur as the result of external influences, either federal or state, cancellation of the insurance program by OSMA and/or consistently uncontrollable, unprofitable operations of INA in respect to policies written for protection of Association members.

Contributions to the Stabilization Fund were made on the basis of a percentage of the basic insurance policy premium and deposits, and accrued interest since 1975 total almost \$215,000.

The terms of the contract provide for distribu-

tion of ½ of the trust after four years, assuming that no claims have been made against the trust. As of this date, there are no claims pending and the Council will begin negotiations with INA for distribution in 1979. The new three year statute of limitations may be helpful in gaining release of the monies. The other ½ of the trust can not be distributed until seven years after the cancellation of the INA contract. However, the three year statute of limitations could provide for negotiations for earlier release.

INA CATEGORY VI

One of the major reasons for the success of the INA-OSMA Malpractice Insurance Program has been the underwriting efforts of the insurance company with the cooperation of OSMA's Council on Insurance. INA underwriters frequently refer cases to the Council for review when it appears to be an unwarranted risk. There are some physicians who by virtue of the nature of their practice, their practice location and specialty, appear to be more prone to suit than other physicians. It has been the policy of the company to cancel those physicians when information supported that action. Cancellation of malpractice insurance in Oklahoma is tantamount to removing one from practice, since there are no other professional liability insurors operating within the state. Thus, the Council on Insurance negotiated with INA and the Insurance Commissioner and developed a special Class VI rating which provides for a substantial surcharge for physicians who have a substantial number of claims pending. At the outset, INA elected to place into Category VI all those physicians who had three or more claims filed or pending against them over the past five years. However, it was determined by the Council that this method of classification was unfair since the mere filing of a claim was not an indication of any wrong doing on the part of the physician. Furthermore, the insurance company and OSMA wishes to encourage the reporting of potential claims and should this become punitive, obviously participants in the program would be reluctant to report incidents. The council therefore is studying a new method for assisting the insurance company in classifying physicians who will be placed in the Class VI Category and will report the recommended method to the Board of Trustees as soon as possible.

TRAVEL PROGRAM

The Association sponsors approximately

three tours each year. Two are designed to last between 10 and 14 days, and the other is for approximately one week. In the 1976-77 administrative year, the Association sponsored the following tours: Far East, Western Mediterranean and the Trans-Panama Adventure with a total participation of 229. All the tour packages for 1977-78 have not been scheduled; however, a trip to London to study the British Health Service has been tentatively scheduled for November 22 through November 30. On each of the tours there are educational seminars which meet the requirements of the AMA's Department of Continuing Medical Education PRA credits and the Internal Revenue Service requirements for tax deductability. The Association receives a small commission from the travel company for sponsoring the tour. The cost of advertising, mailings, labor, etc. are borne by the travel company and no direct expenses are incurred by OSMA. The principal reason for sponsoring tours is to offer to OSMA members the advantages of group travel rates. It is anticipated that the Council will continue to sponsor OSMA tours, so long as membership interest is sufficient to draw reasonable participation.

AMSA, RESIDENT AND HOUSESTAFF RELATIONS

OSMA has a tradition of maintaining a close relationship with medical students at OUHSC. For several years, the Board of Trustees has approved the expenditure of funds to help finance trips for students who attend the AMSA National Convention. In addition, we have also defrayed the expenses of the state student president to the AMA Annual Meeting.

MECO, a medical students project offering students the opportunity to serve in communities around the state in the summer months, has received support from OSMA and physicians are encouraged to participate in the MECO project. MECO students work in physicians' offices and hospitals during the summer at a minimum stipend of \$85 per week, plus room and board.

In recent years, the Association has demonstrated an increased interest in encouraging medical residents to join the Association and work through organized medicine. The American Medical Association is likewise encouraging resident membership. This past year, the

Association sponsored a resident to the AMA Clinical Convention in Philadelphia.

THE PHYSICIANS COMMITTEE

Annually, there are a number of Association members who need special attention from their peers because of personal, professional, mental or physical problems of a significant nature. The committee operates on an informal basis and attempts to identify and direct the physician in need to appropriate counseling service. It is not a disciplinary board and no proceedings of the meetings are recorded. It is felt that more knowledge of the committee's activities is needed and the Council has considered the development of a brief brochure for distribution to county medical society officers and others.

MEMBERSHIP RECRUITMENT

There are approximately 3,300 physicians who reside in and are licensed to practice in Oklahoma. Approximately 1000 are not members of OSMA. It is believed that many of these are eligible for active membership. (About 550) The Council has begun an identifying process to screen non-members and will undertake efforts to contact them. The Council by necessity will have to work through the county medical societies, and lists are being compiled of non-members by county. It is obvious that a successful membership recruitment program would be financially beneficial to OSMA.

RECOMMENDATIONS

1. That the Council continue to study the viability of organizing a captive insurance program for the purpose of writing basic malpractice insurance coverage; and that the House of Delegates authorize the Council to establish such a company if traditional sources are unavailable or rates are beyond reasonable limits.

2. That the Council be authorized to continue to negotiate and sponsor insurance programs for its members.

3. That the Council be permitted to continue to sponsor travel programs for OSMA members.

4. That the Council be authorized to embark upon an active recruitment program encouraging non-OSMA members to join.

5. That the Council be authorized to continue its active relationships with medical students and physicians in training and that the Association approve an expenditure of approximately \$2000 for supporting these activities.

6. That the Council be authorized to prepare a letter for county society officers giving details on the activities of the Physicians Committee.

7. That the Council develop a method for classifying physicians who the insurance company wishes to place in the Class VI Category.

8. That the Council develop and proceed with a method for assessing a surcharge against physicians enrolled in the OSMA Program that are not members of OSMA.

Respectfully submitted,
C. Alton Brown, MD, Chairman

Billy R. Goetzinger, MD
Thomas C. Glasscock, MD
Richard A. McKinne, MD
David R. Brown, MD
Edward E. Velayos, MD
Ed L. Calhoon, MD
Robert W. Kahn, MD
C. E. Woodard, MD
Robert A. McLauchlin, MD
Donald H. Garrett, MD
Jack L. Berry, MD
Jerry B. Blankenship, MD

Report of the
COUNCIL ON GOVERNMENTAL
ACTIVITIES
May 4-6, 1977
(APPROVED AS AMENDED)

INTRODUCTION:

The Council is charged with the reviewing of Federal and State Legislation and regulations of concern to the medical profession or the public health, and initiating activities or undertaking appropriate responses on matters of priority interest. It is to establish and maintain relations with Federal and State government entities having statutory or regulatory jurisdiction affecting the medical profession, the delivery of health care, or the public health. In cooperation with other Association councils and committees, it is to communicate with the medical profession, develop policy recommendations for consideration by the Board of Trustees, and prepare testimony and otherwise conduct the legislative program of the Association. Its activities are as determined and interpreted by the Board of Trustees.

FEDERAL ACTIVITIES:

The Council has examined several Federal

issues that affect the medical profession. We have taken an official stand against HEW's attempts to regulate renal dialysis treatment by means of putting nephrologists on a salaried basis. The Council has made formal comment on the Medicaid fraud and abuse issue to the Oklahoma Congressional Delegation. The Council has worked with the American Medical Association and the Oklahoma Congressional Delegation on the Clinical Laboratory Improvement Act of 1977.

The Council's involvement as far as malpractice insurance, has been at the state level. The Legislative Committee has introduced three malpractice bills which will be discussed later. The Council on Members Services has provided information to our Council on malpractice liability insurance and the pros and cons of forming a medical malpractice cooperative.

In the area of Worker's Compensation, the Council on Governmental Activities is in agreement with the recommendations of the Council on Medical Services that we actively support favorable Worker's Compensation reform efforts. The Council has taken appropriate steps to assure Governor Boren and Legislative leaders that we will support constructive and meaningful reform, particularly in those areas of the law that will remove the examining physician from the adversary process by enabling the medical report to be written in terms of "medical impairment" rather than "medical disability."

The Council has discussed several ways to improve the working relationship with the Oklahoma Congressional Delegation in Washington as well as with the Department of Health, Education and Welfare. Two guest speakers, Ken Benjamin, AMA Washington lobbyist and John Montgomery, Legislative Consultant for the City of Oklahoma City, attended a Council meeting and explained several ways that OSMA might improve its connections with Washington.

The Council is considering for 1977, ways to utilize the medical specialty societies, the county medical societies and the Woman's Auxiliary in a more unified legislative effort. The Council also recognizes that other organizations such as the Oklahoma Osteopathic Association and the Oklahoma Hospital Association are viable forces in our legislative endeavors, and both staff and professional liaison have been established.

STATE ACTIVITIES:

The Council has monitored the State Legislative Committee under the direction of William H. Hughes, MD, Committee Chairman. The Legislative Committee has considered approximately 38 bills that affect the medical profession of this state.

One of the key legislative items under study, is the controversy over the administration of Laetrile as a cancer treatment and preventative. The Legislative Committee is actively opposed to this bill as it represents one more attempt to legislate quackery. The support has been a strong national effort by a group called Freedom of Choice. The Medical Association will make a strong effort to warn the public of this dangerous legislation.

The Committee has been actively working against an optometry bill that would allow optometrists to use diagnostic drugs.

Worker's Compensation reform efforts have been supported by the Legislative Committee as well as the leadership of the State Medical Association.

A bill introduced by Senator Al Terrill, Lawton, dealing with Emergency Medical Services, has been given full support by the Oklahoma State Medical Association.

The Legislative Committee has worked with Senator Phil Watson, Edmond, on three pieces of malpractice legislation which have been introduced this session. These bills deal with areas that would help tighten our current malpractice statutes. They deal with (1) Counter Suits, (2) Written Guaranties and Warranties and (3) Disclosure of Collateral Sources. They have been assigned to Senate Committees and your Legislative Committee is seeking passage of these bills.

For the past several years, the OSMA has worked directly with the Woman's Auxiliary in sponsoring an activity called Doctors' Wives Day at the Legislature. The purpose has been to educate doctors' wives on the important medical issues facing the legislature. This year's program last March 31, focused on Worker's Compensation Reform and Health Care Needs in Oklahoma. There were several speakers involved, from Legislators to community leaders. The attendance was good and the morning's activities were topped off with a luncheon at the Faculty House with William Thurman, MD, Provost, OUHSC, as the luncheon speaker. The

attendance and favorable comments appear to have made this event very beneficial.

Since 1965, OSMA has been directly involved with providing a physician to staff the First Aid Station during the session at the capitol. The intent of this is two-fold, in that the physician can render medical care to those in need and also provide good public relations for the medical profession. In the past, response from physicians willing to serve has been good, but the Legislative Committee would like to urge all physicians to actively participate in the program when contacted next year.

The OSMA Legislative Committee has called upon Oklahoma physicians to contact their various district representatives in either support or opposition to certain legislation. The Oklahoma Medical Political Action Committee known as OMPAC can help the physician-legislator relationship by striving to have political candidates, aware of medical issues, elected into the Legislature. OMPAC is an indirect way in which physicians, collectively, can contribute money to various political candidates. The Legislative Committee urges active support of OMPAC by Oklahoma physicians.

RECOMMENDATIONS:

1. The Council on Governmental Activities, in an effort to improve liaison communication between the Oklahoma Congressional Delegates and the Department of Health, Education and Welfare, recommends, upon approval by the Executive Committee, hiring an individual as a Washington consultant for OSMA. He should have extremely close contact with the Rogers Health Subcommittee and be in a position to be singularly effective. He should be competent in all legislative regulatory matters.

He would maintain direct liaison with staff members of Senate and House Committees that consider health legislation, with the Oklahoma Congressional Delegation and their staff, and with individual regulators in HEW and elsewhere, who develop both administrative proposals for legislation and who draft regulations. He would directly represent the OSMA in these matters so as to shape legislation and regulations in a fashion favorable to Oklahoma medicine. He would continuously monitor the Federal Register for proposed regulations and communicate their proposal and potential impact to the OSMA in time for an effective OSMA response. In these efforts he would work cooperatively with the AMA Washington office

and other offices as appropriate. He would also arrange meetings between key Oklahoma physicians and the Congressional Delegation members.

The budget requirements would be an annual salary of \$12,000 plus periodic travel expenses via Oklahoma and Washington. The Council is currently contacting the surrounding states, namely, Texas, Kansas, Louisiana and Arkansas to discuss the possibility of using this individual as a cooperative lobbyist for the five states. In the event the cooperative effort can be arranged, this would decrease the budget requirement.

2. As a result of an OSMA Resolution introduced in the AMA House of Delegates, the Council plans to work with the AMA in establishing a "Congressional Key Man" team in Oklahoma. This concept calls for a key physician to be assigned to each congressman. The AMA, as well as the Council, will keep the key physician abreast of legislative affairs so that he can contact his designated congressman when called upon. As rapidly as possible, a state legislative counterpart will be developed and parallel organizations created among active Woman's Auxiliary members. Means to communicate with state specialty societies will also be developed.

3. The Council has visited with Ken Benjamin of the AMA Washington office to discuss the desirability of arranging no less than two annual meetings between approximately six OSMA representatives (to be designated by the Board of Trustees) and the Congressional Delegation in Washington. Mr. Benjamin stated that such meetings have proved very effective in other states and that the AMA would also recommend taking this step. The budget requirements of this recommendation would involve the travel expenses, lodging and meals for those six representatives. Based on current figures, this could amount to approximately \$350.00 per trip (two days and one night) per person, or \$2,100 for six per trip.

4. The Council recommends that at least one Oklahoma Senator, Representative or Congressman periodically be invited to Oklahoma for a "Health Forum." This forum would consist of a predetermined topic or simply a structured question and answer session.

5. The Council recommends a general fund of \$2,500 for miscellaneous expenses involved with meeting arrangements and mailings.

Respectfully submitted,
Perry A. Lambird, MD,
Chairman

Members: David Berman
Theodore J. Brickner, Jr., MD
Walter E. Brown, MD
Jerome M. Dilling, Jr., MD
James E. Freed, MD
R. W. Goen, Jr., MD
William L. Hughes, MD
Vernon M. Lockard, MD
Edwin E. Rice, MD
Mrs. R. Layton Runkle
Armond H. Start, MD
Lanny F. Trotter, MD

OKLAHOMA STATE MEDICAL ASSOCIATION LEGISLATIVE COMMITTEE UPDATE

Legislative Committee Action

Supported — *S. B. 10 – "Death Penalty"* (Dawson) Would allow execution by lethal injection. Passed both Houses, now in conference to work out amendments.

Supported — *S. B. 240 – Mental Health Code* (Funston) Passed Senate, Passed House Committee; now on House Floor.

Opposed — *S. B. 66 – Drug Labeling* (Dawson) — Dead in Committee.

Supported — *S. B. 138 – Sunset Law* (Holden and Elder) — Signed by Governor Boren on March 10, 1977.

Supported — *S. B. 194 – Infant Medical Treatment* (Pierce) Signed by Governor Boren on March 8, 1977.

OSMA Sponsored Bills – S. B. 298 (Malpractice) Counter Claim (Watson) Senate Committee on Judiciary.

S. B. 299 (Malpractice) Guaranty & Warranty (Watson) Senate Committee on Professions and Occupations.

S. B. 300 (Malpractice) Collateral Sources (Watson) Senate Committee on Judiciary.

Supported — *S. B. 310 – Emergency Medical Services Act* (Terrill) Passed Senate and House Committee; now on House Floor.

Opposed — *S. B. 338 – Hospital Privileges for Chiropractors* (York) Senate Committee on Professions and Occupations. Dormant in Committee.*

Neutral — *H. B. 1005 – Board of Medical Examiners* (Nance) Dormant in House Committee on Professions and Occupations.

Opposed — *H. B. 1022 – Rape Victims Treatment* (Cleveland) Still in Senate Committee on Criminal Jurisprudence.

Opposed — *H. B. 1064 – Physical Exams for Barbers* (Parris) Passed House. Now on Senate Floor (Mandatory physical exam has been deleted).

Opposed — *H. B. 1087 – Radiation Safety* (Hammons) Passed House. Now in Senate Committee on County, State and Federal Government.

Supported — *H. B. 1199 – Cervical Cancer Screening* (Atkins) Still in House Committee on Appropriations and Budget. A letter of support has been sent to Representative Atkins. Good Prospect.

Opposed — *H. B. 1260 – Chiropractic* (Nance) Dormant in House Committee on Government Reforms.

Opposed — *H. B. 1272 – Lay Members on Boards* (Parris) Dormant in House Committee on Professions and Occupations.

Supported — *H. B. 1291 – Exempt Higher Education Institutions from Open Meetings Law* (Atkins) Dormant in House Committee on Judiciary.

Opposed — *H. B. 1316 – Optometric* (Morgan) — Passed full House. Now in Senate Committee on Public and Mental Health, which will consider this bill on May 5, 10:00 a.m.

Opposed — *H. B. 1324 – Laetrile* (Stephenson) Passed the full House. Passed Senate Committee on Agriculture. Now in Senate Committee on Public and Mental Health.

Neutral — *H. B. 1334 – Death with Dignity* (Duckett) Dormant in House Committee on Judiciary.

*"Dormant" does not mean *dead*, simply will not be heard this session, but will become active next session *without* being reintroduced.

A copy of the bill or any information concerning these bills can be obtained from the OSMA Headquarters. Contact

Lyle Kelsey,
Director of Governmental Affairs
(405) 842-3361

Report of the
COUNCIL ON PROFESSIONAL AND
PUBLIC RELATIONS
May 4-6, 1977
(APPROVED)

INTRODUCTION:

The Council on Professional and Public Relations is responsible for all activities, both internal and external, that are related to or have a direct bearing on either public or professional relations for the state medical association and for its membership. It is the responsibility of this Council to represent the association in all matters dealing with the press and in all matters dealing with other professional organizations. It is also the responsibility of this Council to maintain and perfect internal relations with its members and with prospective members. Additionally, this Council provides aid and assistance to all other councils and committees in matters related to professional and/or public relations.

The activities of this Council have been divided mainly between internal and external affairs.

INTERNAL AFFAIRS:

During part of the 1976-77 organizational year, the Council on Professional and Public Relations published a monthly newsletter called *OSMA News*. This publication was typeset and externally printed, and the publication date was varied with that of *The Journal of the Oklahoma State Medical Association* in an effort to insure the periodic dissemination of medical information to the OSMA membership. After publishing this newsletter for one entire year, the Council on Professional and Public Relations reviewed its effectiveness and found that printing and typesetting time usually ran approximately 10-14 days. The Council felt a more expedient method of communicating with its membership was needed, and therefore *OSMA News* was discontinued. In its place the Council has substituted a new newsletter with a quick print format. This format allows quick dissemination of news and enhances the overall communications ability of the OSMA.

In conjunction with the changeover in newsletter formats, the Council also reviewed and updated its mailing list. Last year it was found that the two principal lists being used by the OSMA were badly out of date and in need of a major overhaul. The primary list (all physicians in the state) has been replaced with a new com-

puter list, and the comment list (home addresses) has been deleted.

One of the suggestions of the Council last year was the development of an OSMA resource library. It was hoped that sufficient time and space would be available to begin organizing a library which could provide both OSMA members and persons outside the association with up-to-date medical information. Due to many factors, including the reorganization of the OSMA office, it has not been possible to commit the necessary space for developing such a library. Instead, the Council has begun gathering as much medical information as possible on a more informal basis. A medical librarian has been contacted and secured, however, and as soon as sufficient time and space is available, this library will be developed.

The Council on Professional and Public Relations now has a membership brochure which describes the advantages of belonging to organized medicine at about 90 per cent completion. It is estimated that this brochure will be approximately 10-14 pages in length and will go into some detail in describing the organization of the OSMA, the purposes of organized medicine and the many benefits of belonging to the state medical association. When this brochure is completed (only the printing still is required), it will be distributed to every doctor in the state and to every senior medical student. It will serve as an OSMA "image piece."

In an effort to further enhance the communications between the OSMA and its membership, the Council on Professional and Public Relations has become more involved in the publication of *The Journal of the Oklahoma State Medical Association*. Increased emphasis has been placed upon the news section of this *Journal*, and attempts have been made to place interesting socioeconomic articles in the publication. The Council has continued its interview series and has carried special articles on the British Health Service. The Council has also investigated advertising problems which are common to nearly all medical journals, and recommendations concerning *Journal* advertising and format changes are listed at the end of this report.

One of the major communications programs conducted by the Council this past year concerned the swine influenza immunization program. The Council on Professional and Public Relations cooperated with the Council on Public and Mental Health and the Oklahoma State

Health Department in publicizing this program to the approximately 3,000 doctors in the state. In addition to an informational memorandum which was mailed to all Oklahoma physicians from Doctor Stephen Adelson, news articles were carried in both the *OSMA News* and *The Journal of the Oklahoma State Medical Association*. Additionally, a special question and answer series was developed and carried in each of these publications.

As a part of its internal activities, the Council has cooperated with the Physicians Committee and has agreed to produce a folder describing the purposes of this committee as soon as reorganization has been completed. This committee is currently reviewing its purposes and organization and has requested that production of the folder be delayed until its activities can be formalized.

The Council has also taken a close look at other internal communication requirements of the state medical association and has taken a particular interest in the production of an audiovisual presentation. A recommendation regarding this can be found in the closing section of this report.

EXTERNAL ACTIVITIES:

Perhaps the principal external project completed during the last 12 months is the production and distribution of the Medical Update series. The Council on Professional and Public Relations has placed approximately 2,000 of these placards in physicians' offices throughout the state and approximately 200,000 of each of the three brochures (national health insurance, malpractice insurance and physician advertising) have been distributed throughout the state as a part of this project. Additionally, news clippings have shown that these brochures have generated letters to the editors of various state newspapers regarding these vital medical issues. The Council on Professional and Public Relations considers this project one of the most successful it has ever conducted and plans to continue using the Medical Update placards as an integral part of its total public relations package.

For the first time in its history the Council on Professional and Public Relations will present a formal media-recognition award at this year's meeting of Summit. The Council has long felt that members of the press should be recognized for their contributions to both the public and the profession through the timely dissemination of medical information, and it has chosen to for-

malize this procedure by presenting an OSMA Medical Journalism Award. This year the first OSMA Medical Journalism Award will be presented to Ervin Watson, who is the medical writer for the *Oklahoma City Times*. The Council felt that the reporting of Mr. Watson best exemplified the principles of fair and accurate journalism, and it will present him with a plaque commemorating his selection, and it will also present a \$250 scholarship in his name to the journalism school of his choice.

The Council has also worked during the past 12 months to improve its overall relations with the various news media. Although it was not possible to conduct the media tours across the state, the Council has improved its rapport through more traditional methods. Newspaper positions frequently change, however, and the Council earnestly feels that these tours should be conducted each year. A recommendation can be found in the closing section of this report.

The Council has also increased its external activities by becoming more involved in special medical programming. In February, 1977, the Council on Professional and Public Relations co-sponsored a series of "Ask A Doctor" programs with the Oklahoma Educational Television Authority. These programs were part of the "Ask A Professional" series, and were aired live over Channels 13 and 11. The "Ask A Doctor" series was aired during prime-time programming on each of the Wednesdays during the month of February, and the following topics were discussed: Colds and Viruses, Diabetes; Heart Disease and Hypertension; and Arthritis and Rheumatism. In all, 36 doctors participated in this project, and \$1,998.80 was spent in promoting the program. Due to the overwhelming success of "Ask A Doctor," the OSMA has been asked to participate again in May and has accepted.

At the same time, the OSMA has also begun an interview series with Lola Hall and the "Early Beat" program on KWTU (Channel 9). The OSMA contacted Ms. Hall in early March about placing a physician on her program, and she accepted the proposal. The project was begun in March, 1977, and calls for two physicians to appear on the program each month.

The Council on Professional and Public Relations feels that if a disastrous proposal such as National Health Insurance is to be defeated, the medical profession must do all that it can to

improve the image of the physician in this country. Perhaps the most effective way of accomplishing this would be paid advertising on television, although the cost of such advertising is obviously prohibitive. Therefore, the Council has produced three public service announcements for airing by the state's television stations. These announcements will be carried free of charge as part of the stations' public service programming, and will cost approximately \$6,000-\$7,000 to produce. Cost/benefit figures are not yet available, but a similar project conducted by the Oklahoma Bar Association cost a total of \$6,000 to produce and has thus received approximately \$55,000 in air time. A recommendation to continue this series may be found in the closing section of this report.

The Council on Professional and Public Relations requests a tentative funding in order to produce a documentary film on National Health Insurance should it appear necessary. The Council has deferred any action on this project because it has not felt that the time was right. National issues such as National Health Insurance, the Council feels, should be addressed on a national level and should logically be treated by the American Medical Association. It is hard to determine at this point what type of program the AMA will conduct regarding National Health Insurance, although it is obvious that since the AMA has submitted its own NHI proposal to Congress, it cannot combat the proposal per se.

The Council on Professional and Public Relations will continue to investigate the need for such a film and has included a recommendation in the closing section of this report.

DOCTOR OF THE DAY:

One of the OSMA projects which has been reorganized under the jurisdiction of the Council on Professional and Public Relations is the Doctor of the Day program at the Oklahoma Legislature. Through this program the OSMA places a physician at the State Capitol each Monday, Tuesday, Wednesday and Thursday during the months of January, March, April and May. Participating physicians man a First Aid Station in the State Capitol building and are on call to provide emergency medical aid should the occasion arise. This program has done much to improve the OSMA's rapport with the legislature and has provided much valuable public relations. This year the program was partially reorganized, and all equipment and medications have been provided by the Okla-

homa City Area Hospital Council. At this point it seems that the program has been improved by this reorganization, and it is hoped that the present co-sponsors can be retained next year.

MEDICAL HERITAGE COMMITTEE:

The Medical Heritage Committee of the Oklahoma State Medical Association has again been active this year in researching the history of medicine in this state. Among its principal activities was the investigation and securing of the Doctor W. J. Risen Collection for display at Oklahoma Medical Summit '77. This collection was located by the Medical Heritage Committee and was brought from Hooker, Oklahoma, in a cooperative venture by the Summit Steering Committee and the Medical Heritage Committee. It is representative of medicine and the way it was practiced in this state during the period of 1890-1930 and will be on display during Summit in the Exhibit Hall.

SPECIAL ASSESSMENT FUND FOR PUBLIC EDUCATION:

A total of \$55,004.09 was carried over during the 1976-77 organizational year in the OSMA's special assessment fund for public education. During 1975 OSMA members built up this special fund through voluntary \$100 contributions in order to launch an advertising/public relations campaign to combat the utilization regulations which were handed down by HEW on November 29, 1974. The purpose of the fund and the advertising/public relations campaign was to either defeat utilization review as envisioned by HEW or to bring about substantial amendments. However, as a result of a successful AMA court action against HEW and as a result of the OSMA gaining approval of its model utilization review concept (Oklahoma Utilization Review System), the planned advertising campaign was not initiated. The OSMA volunteered to return all contributions, but instead participating physicians requested that the fund be used in the future to educate the public regarding medical issues and to fight government intervention in the private practice of medicine. The balance as of July 1, 1976, was, as stated above, \$55,004.09.

During the past 12 months a total of \$12,253.80 was spent in producing and distributing the Medical Update placards and brochures. This leaves a current balance in this special fund of \$42,750.29.

MEDICAL-LEGAL RELATIONS COMMITTEE:

During the past three years the primary func-

tion of the Medical-Legal Relations Committee has been to resolve whenever possible disputes between members of the two professions. In addition it has considered possible changes in the inter-professional code itself. For several years the joint committee conducted a biannual medical-legal seminar covering topics of interest to both professions. The seminar was designed primarily, however, to strengthen intra-professional relations. It was only the increasing expense of the meeting coupled with the diminishing attendance that caused the committee to abandon this endeavor three years ago. It is now reconsidering the possibility of conducting future seminars. In addition there appears to be the need to reconsider the inter-professional code. Changes in the court's system, in the practice of law and in intra-professional philosophy dictates a reconsideration. Specific recommendations for this committee are included in the closing section of this report.

RECOMMENDATIONS:

1. Membership Brochure — The Council on Professional and Public Relations recommends that sufficient funds again be approved in order to produce a membership brochure describing the Oklahoma State Medical Association and organized medicine in general. It is expected that the production of such a brochure would cost approximately \$4,500.

2. Physicians Committee Folder — The Council recommends that \$2,000 be committed to the production of a Physicians Committee Folder. This folder is needed to explain the purpose of this committee and to make it more effective. Although the Physicians Committee is not organized under the jurisdiction of the Council on Professional and Public Relations, this Council suggests that it be responsible for the production of this folder due to its expertise in this area.

3. Media Recognition Award — The first OSMA award for medical journalism will be presented this year at the OSMA annual meeting. The Council feels this is a valuable and effective manner in which to recognize outstanding members of the press, and it suggests that the award be continued. The total cost, including publicity, is approximately \$500.

4. News Media Relations — The Council earnestly believes that it is important that the OSMA staff make periodic visits to parts of the state outside the Oklahoma City area. This will not only improve our rapport with the various press, but it will also make us more aware of any

problems that may exist. The total cost of this project would be approximately \$750.

5. Medical Update Series — Medical Update has already proven to be an effective public relations tool, and the Council feels that continued use of this project is imperative. Approximately 200,000 of each of the first three brochures have been distributed and have been in physicians' offices for approximately eight months. The Council feels that these brochures should be updated and requests that approximately \$5,000 be committed for this purpose.

6. Ask A Doctor — The success of the OSMA's Ask A Doctor series is apparent by our invitation to appear again in May. Many favorable comments were received about this program, and the Council feels that this is the type of public relations an association such as ours cannot afford to buy. The Council recommends that if we are asked to participate again next year that we accept and that we agree once again to advertise the program. The total cost of advertising four weeks of this programming would be approximately \$2,000.

7. Public Service Announcements — The Council feels that public service announcements are the most effective way of communicating with this state's population and also the least expensive. Not only are such announcements "non-self-serving," but they are also of real benefit to the population. The first three spots produced by the Council can be viewed by the Exhibit Hall. The Council on Professional and Public Relations recommends an additional three-six spots be produced during the 1977-78 organizational year, depending upon AMA activity in this area. The AMA is currently surveying state and county medical society executives to see if there is an interest in a nationwide project such as this. Incidentally, such a program was suggested by this Council almost a year ago. The cost of producing three additional PSAs would be approximately \$6,500.

8. Video Cassette Recorder/Playback Unit — In order to conduct a complete public relations program, the Council on Professional and Public Relations feels it is necessary to have recording and playback capabilities. For this reason it suggests that a modern video cassette recorder/playback unit be purchased. This would enable OSMA staff to record news casts and documentaries aired on television, and

would also enable the staff to dissect these programs and to issue appropriate rebuttals. The Council feels such a unit would be invaluable and recommends an expenditure of \$1,700 to purchase such a unit. The Council on Professional and Public Relations also points out that this unit could become an integral part of the association's continuing medical education program.

9. Medical-Legal Relations Committee — The Council on Professional and Public Relations recommends that the Medical-Legal Relations Committee be continued and that it reinstitute its biannual medical-legal seminar or some other activity which would bring the two professions closer together. The Council also recommends that physician members of this committee work with their attorney counterparts in revitalizing the inter-professional code. No cost.

10. *The Journal of the Oklahoma State Medical Association* — The Council on Professional and Public Relations recognizes the problems now being experienced by our *Journal* and by other medical journals throughout the country. The Council also recognizes that this publication is a membership benefit and to a large degree should be treated as such. However, the Council feels that steps should be taken to improve the financial situation of *The Journal*. The Council on Professional and Public Relations recommends the following: a. That additional emphasis be given to local advertising and that a part-time salesman be hired on a commission basis (25 per cent). b. With the phasing out of *OSMA News*, the news section of *The Journal* will become increasingly important. The Council recommends that more emphasis and space be given to the news section and that an increased number of socioeconomic stories be carried. c. The Council on Professional and Public Relations recommends that the interview series of *The Journal of the Oklahoma State Medical Association* be continued and that interesting feature stories be carried whenever possible. The Council also recommends that \$2,000 be set aside for paying freelance contributors to *The Journal*. d. The Council on Professional and Public Relations recognizes that *The Journal of the Oklahoma State Medical Association* is a quality publication and ranks among the best in the nation. The Council suggests that in order to generate more readers for this fine publication that the cover of *The Journal* be tied directly, whenever possible, to

an inside story. e. The Council on Professional and Public Relations suggests that the editorial board and the business manager review the advertising and subscription rates of *The Journal* in order to see if they need to be adjusted. The Council recognizes that the expertise in such matters lies with the Editorial Board and Business Manager and leaves any adjustments to their discretion. f. The Council on Professional and Public Relations suggests that a mechanism be worked out to encourage the submission of quality scientific articles to *The Journal of the Oklahoma State Medical Association*.

Respectfully Submitted,
M. Joe Crosthwait, MD, Chairman

Members: Thomas S. Gafford, MD
Casey Truett, MD
Eugene S. Bell, MD
Rollie E. Rhodes, Jr., MD
James D. Funnell, MD
Rex E. Kenyon, MD
Marion C. Wagnon, MD
Charles N. Atkins, MD
Homer D. Hardy, Jr., MD
Jack L. Richardson, MD
Jack W. Parrish, MD
James R. Rhymer, MD
Richard S. C. Grisham, MD
Chester L. Bynum, MD
Gordon H. Deen, MD
Linda Mae Johnson MD
Edward W. Allensworth, MD

Report of the
COUNCIL ON PUBLIC AND MENTAL
HEALTH

May 4-6, 1977
(APPROVED AS AMENDED)

INTRODUCTION:

This Council is responsible for overseeing and conducting all Oklahoma State Medical Association activities as they relate to public and/or mental health. In addition to conducting and overseeing planned programs, the Council on Public and Mental Health offers assistance to other OSMA councils and committees as it is requested or required. Additionally, the Council is responsible for maintaining close liaison with all public and private organizations directly or indirectly involved with these activities.

PUBLIC HEALTH ACTIVITIES:

One of the major projects that the Council on Public and Mental Health became involved in during the past year was the massive swine influenza immunization program. Although this program experienced some difficulties, the Council on Public and Mental Health cooperated in every way possible to make this program as successful as possible. Even before the immunization program was initiated, the Council on Public and Mental Health met with officials from the Oklahoma State Health Department to work out any problems which could be foreseen. A memorandum was developed by Council Chairman, Doctor Stephen J. Adelson, and was mailed to all physicians in the state. This memorandum included details about the program, details about the timetable, and additionally it encouraged all private physicians to take part in the statewide/nationwide effort to immunize the population against swine flu. Additionally, the Council cooperated in developing articles for *The Journal of the Oklahoma State Medical Association* and for *OSMA News* in an effort to publicize the campaign and to answer any questions which existed among physicians.

In all, 487,804 persons were vaccinated during this campaign. 264,417 persons received the bivalent vaccine: this represents 41 per cent of the target population of those persons over age 65 or chronically ill. 223,387 persons received the monovalent vaccine: this represents 18 per cent of the target population (those persons who are healthy).

The Council on Public and Mental Health has also provided counsel to the Oklahoma State Department of Health on other matters including its immunization schedule. The Council on Public and Mental Health backed recommendations from the State Health Department that the immunization schedule be changed for rubella, rubeola and mumps vaccine, and it also supported a State Health Department recommendation that the recommended dosage for polio vaccine not be changed. Additionally, the Council supported a State Health Department recommendation that its communicable disease reporting form be changed by eliminating the reporting requirement for several diseases. The State Health Department had recommended this change since no positive action is ever taken in their regard, and the Council concurred. The Council on Public and Mental Health will cooperate in distributing revised

immunization schedules to the state's physicians as soon as they are ready for distribution.

Among the principal charges given the Council on Public and Mental Health by the House of Delegates was the establishment of a Committee on Environmental Quality. Due to a number of factors, including a changeover in the chairmanship of this Council, this responsibility has not been met. The Council on Public and Mental Health recognizes the need for such a committee and feels that it should be organized within this Council. A number of persons have been contacted about serving on this committee, and appointments will be made soon after the annual meeting.

The Council on Public and Mental Health has also spent considerable time and effort in surveying the need for a thyroid cancer screening program in this state. Such a need was brought out by a recent program carried by *60 Minutes* which pointed out that although the use of radiation therapy in the treatment of children with swollen adenoids and tonsils was acceptable medical practice during the 1930's-1950's, it has now been shown that such treatment resulted in an increased incidence of thyroid cancer. The *60 Minutes* program generated a "flood" of inquiries from concerned parents, many of which could not be answered because of the amount of time which had elapsed. In an effort to fulfill a public need and to relieve a concerned population, the Council on Public and Mental Health has decided to investigate the practicality of conducting a statewide thyroid cancer screening program. The Council is currently developing guidelines for such a program and will survey the membership in order to determine the amount of interest. If there is sufficient interest, the Council on Public and Mental Health suggests that the thyroid cancer screening program be conducted either in the month of July or August and that it be conducted free of charge in the physician's office. The Council on Public and Mental Health suggests that the program be conducted in cooperation with the Oklahoma Press Association and that participating physicians be widely publicized through the various media. Public service publication of lists of participating physicians would insure the widespread knowledge of the program and would provide the OSMA and individual physicians with valuable public relations. The entire program would be conducted

with the understanding that it did not include free laboratory testing or treatment.

In other matters the Council on Public and Mental Health also reviewed a model bill which was provided by the American Medical Association and which would establish a comprehensive health education program in elementary and secondary schools. The Council approved the concept of the bill and will work with the OSMA Legislative Committee, the Oklahoma City School Board, and the Oklahoma Education Association in gaining legislative approval.

MENTAL HEALTH ACTIVITIES:

The Council on Public and Mental Health provided advice to the OSMA Legislative Committee on two bills related to mental health. The Council reviewed Senate Bill 240 and Senate Bill 280 and recommended that the Legislative Committee work for passage of both these bills provided amendments could be added which would provide funding mechanisms. The Council plans to become more involved in mental health activities in the near future.

RECOMMENDATIONS:

1. The Council on Public and Mental Health recommends that a Thyroid Cancer Screening Program be conducted in the state of Oklahoma provided there is sufficient physician interest. The total program should include the widespread publication of lists of participating physicians and should be conducted during one month this coming summer. It should be widely understood that the Thyroid Cancer Screening Program does not include free laboratory testing and/or treatment. The estimated cost of this project including promotion is \$750.

2. The Council on Public and Mental Health recommends the establishment of a Committee on Environmental Quality under Council jurisdiction. The purpose of such a committee would be to investigate the environmental aspects of health and health care and to advise the Council and the Oklahoma State Medical Association on issues of concern to the public and to the environment. No cost.

3. The Council on Public and Mental Health recommends that the OSMA Legislative Committee work with the Oklahoma City School Board and the Oklahoma Education Association in passing the Comprehensive Health Education Act (as provided by the American Medical Association and amended for use in Okla-

homa). A minimal amount would be required to support passage of this legislation.

4. It is recommended that the Council on Public and Mental Health continue to serve in an advisory role to the Oklahoma State Department of Health. No cost.

5. It is recommended that the Oklahoma State Medical Association offer the services of its membership to assist any legislative committee investigation of health care facilities in this state. The president of the Oklahoma State Medical Association shall appoint members to assist such a committee upon request of any legislative body.

Respectfully Submitted,
Armond H. Start, MD,
Chairman

Members: R. LeRoy Carpenter, MD
Glen L. Berkenbile, MD
Hayden H. Donahue, MD
Nolen L. Armstrong, MD
Charles E. Smith, Jr., MD
Daniel F. Keller, MD
Samuel A. Wheeler, MD
Jim H. Earl, MD
Michael H. Whalen, MD

Report of the
COUNCIL ON MEDICAL EDUCATION
May 4-6, 1977
(APPROVED AS AMENDED)

INTRODUCTION:

The Council shall study and make recommendations related to all matters of maintaining or improving the level of medical competency in Oklahoma, including but not limited to maintaining liaison with medical education colleges in Oklahoma, to maintaining liaison with other health professions or occupations, to conduct continuing medical education courses for Association members, to the accreditation of medical education programs in Oklahoma. It will also monitor continuing medical education standards as they may be required by Association policy. Financial aid to education shall also be among the duties of the Council.

It was the charge of this House that the Council on Medical Education be instructed to de-

velop the criteria and necessary accompanying accreditation procedures for required continuing medical education for Association members, and that an official accrediting body be created by OSMA in consultation with various specialty and medical organizations for the purpose of accrediting continuing medical education courses not otherwise accredited by recognized accrediting agencies. The amount of required continuing medical education will be evaluated in a three-year period. The completed plan and implementation procedures are outlined in this report and the first enrollment period will commence in January, 1978 and conclude in December, 1980.

PHYSICIAN'S RECOGNITION AWARD:

This Council considered two avenues in determining the number of hours which would be required, their breakdown by categories and the period of time which would be allowed to fulfill the CME requirement. One choice was to develop an entirely new system for OSMA; however, it was felt that this system would require too much expense as far as setting up new record keeping and information dissemination procedures. It was also the Council's opinion that it would cause too many inconsistencies and create a much too complicated bureaucratic system. The other choice, and the direction the Council proceeded, was for the OSMA CME Program to be identical to the requirements of the AMA's Physician's Recognition Award.

The PRA requires 150 credit hours of continuing medical education activities earned within a 3-year qualifying period. Of the 150 credit hours, at least 60 must be earned in Category I. All or part of the remaining 90 hours may be in additional Category I hours, or any combination of hours from Categories 2 through 6, within the credit hour limitations specified for each category.

It was recommended by this Council that, as a requirement for membership in the OSMA, each physician hold a valid AMA PRA as of January 1, 1981. The requirements for the Award were chosen as they have been used successfully for many years, and represent essentially equal fairness to both the metropolitan and rural physician.

There are several medical organizations which presently have certifying programs in CME for their own membership, in Oklahoma these are the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists and the American So-

ciety of Clinical Pathologists — College of American Pathologists. These organizations will continue with PRA in the same manner as before, only now under the auspices of OSMA.

The OSMA would be notified by the AMA of any Oklahoma physicians receiving the Award or the physician would send a copy of the Award to the Association for notification. If the physician does not attain the Award in the three-year period, he would be placed on probation by the Association for one year during which time he must receive the Award. The Council is of the opinion that any physician who is an active OSMA member should be expected to meet the OSMA membership requirements of a valid PRA by January, 1981. The Council realizes that circumstances may arise which would hamper physicians from meeting the requirements, and these will have to be dealt with on a case-by-case basis with the Board of Trustees making the decision to waive or not waive requirements.

An important goal of this Council is to enlist all Oklahoma physicians into the PRA program. A budget item of \$5,000.00 is requested by the Council. This money will be used for a statewide enrollment campaign, the setting up of the office and record keeping system and the publishing and disseminating of the information on CME and PRA.

OSMA SURVEY OF INSTITUTIONS FOR ACCREDITATION BY OSMA:

The Council has worked very hard this past year to develop the criteria and accreditation procedures, and has been provisionally approved to survey institutions for accreditation by the Council on Medical Education of the AMA. This will allow us to survey institutions which desire to put on postgraduate courses thereby allowing Oklahoma physicians to obtain credit for courses in their own cities and state. These courses would include Category I hours. The institutions will be surveyed by a team from our Council and, if approved, a recommendation for approval would then be sent on to the AMA for approval by their Committee on Continuing Medical Education. It is important to note that we do not have the final approval but may survey and recommend.

Our Council has recently notified all Oklahoma hospital administrators and chiefs-of-staff that they may request being surveyed by our group and provided with a pre-survey ques-

tionnaire to complete prior to scheduling the actual on-site survey. The response to our initial notification was very good and we received requests for the pre-survey questionnaire from 52 hospitals, each of which has received the materials. Due to the complex nature of the questionnaire, there have been several requests for information and explanation. The AMA has been contacted about the prospects of an OSMA-AMA sponsored orientation program for representatives from the prospective participating institutions. The AMA accepted the invitation and a meeting is tentatively being scheduled for June 1, at the Lincoln Plaza in Oklahoma City. It should be noted that the pre-survey questionnaire is extensive and the institution must be committed to significant financial and manpower resources to have a successful recommendation. It is anticipated that fewer than a dozen institutions in the state will be approved.

If the institution is approved, it will then plan and carry out its own courses without having to have each course approved. It should be emphasized that the institution will be approved rather than courses. If only courses are desired to be approved, the institution may continue to be surveyed and approved by OUHSC under the direction of Doctor Irwin Brown.

The Council is now and will continue working toward having one hospital serve as a pilot program for AMA inspection in the very near future, and to have our own OSMA-sponsored CME program working well enough so that any hospital that meets the requirements will have been inspected and approved for accreditation by January, 1978.

COSPONSORSHIP OF POSTGRADUATE SEMINARS:

The Council has cosponsored with the Tulsa County Medical Society a two-day postgraduate session held in Tulsa in January the last two years under the auspices of the AMA. This meeting has been quite successful with over one-hundred physicians attending the first meeting and over one-hundred and fifty attending the meeting held in January.

Mr. Gale K. Jewitt, Director of the Department of Continuing Education Seminars from the AMA met with Floyd F. Miller, MD, in February, 1977 to discuss the possibility of allowing Oklahoma City to have the meetings next year; Doctor Miller agreed that this seemed to be reasonable and would appreciate a response from Oklahoma City physicians. He suggested

the possibility that the meeting in 1979 be in Lawton as this would allow the meeting to be held in the northern, central and southern parts of the state on successive years, and it would avoid repetitiveness and reach a slightly different audience.

SOCIOECONOMIC SEMINARS:

The Council is also concerned with providing educational opportunities to physicians in the area of professional management. Four seminars are being planned for this next year. The sessions will cover subjects like operating a corporation, pension plans, tax law changes, etc. The plans are to charge a tuition for the seminars to offset direct expenses.

LIAISON WITH THE COORDINATOR OF CE AT OUHSC:

A primary concern of OUHSC that will be beneficial to CME in the state is the hiring of a coordinator of continuing education. Applicants for this position are being processed and it is hoped that someone will be acting in that capacity sometime between July 1 and September 1 of 1977. The person who fills this position will be responsible for coordinating the continuing education activities of all OUHSC colleges, developing comprehensive information on continuing education courses, evaluating courses and developing a calendar of courses for OUHSC.

Our Council and OSMA staff will be working very closely with this person in developing a clearing house of CME courses for the state and should prove beneficial in OSMA efforts to create and set up a calendar of events on a statewide basis.

SUMMIT '77:

In 1975 the Association entered into a three-year agreement with the Oklahoma Academy of Family Physicians and the Oklahoma Clinical Society to produce Summit, the only statewide medical meeting sponsored by the three organizations. Summit is the responsibility of the Presidents of the three participating organizations who serve as a Steering Committee and appoint general chairmen and committees to plan and execute Summit activities.

The Summit combine was organized due to waning interest of drug manufacturers and purveyors of medical supplies to exhibit at medical meetings in Oklahoma sponsored by each of the three organizations now participating in Summit. Each organization experienced difficulty selling sufficient exhibits to pay for the

expenses of the meeting. In 1972 the Academy of Family Physicians and the Clinical Society joined in Myriad Medicine and it was obvious that the combined meeting was more attractive to exhibitors than the singularly-sponsored meeting. Thus, in 1974, OSMA joined with the other two groups. While the meetings have been a financial success, the combined efforts have not resulted in substantial increased attendance. In 1974 the first year of Summit, there were 837 physicians in attendance; in 1975, the number was comparable; but in 1976 the total fell to slightly less than 600.

Each year the Summit Committee organizes the program as it is felt appropriate at the time and scientific and socioeconomic offerings vary from year to year. In 1974, Summit offered 18 hours of approved CME; in 1975, 18; in 1976, 20 hours and 1977, 12 hours. With the possible advent of a continuing medical education requirement for membership in OSMA, it is assumed that the scientific offerings will become more important and more hours will be offered in future years.

The cost of producing Summit varies each year based upon location and the extent of the program. Costs have varied from approximately \$35,000 in the early years of the combined meeting to a high of \$60,000 in 1974. Since the combined meetings began, Summit has produced profits of approximately \$10,000 each year which have been distributed equally between the three participating organizations in accordance with a written policy adopted in 1975.

MEDICAL SCHOOL ENDOWMENT:

In 1976 the House of Delegates received from the Council on Medical Education a special report recommending that a plan be designed to provide OSMA members the opportunity to contribute to the endowment of a professorial chair at the OU Medical School. Several meetings have been held with OUHSC officials, however, the Council has experienced some difficulty in arriving at a conclusion that is acceptable to the school and will encourage participation by OSMA members. The cost of such an endowment would approximate \$750,000. Obviously, to accumulate the required amount, the trust would need contributions from most, if not all the physicians in Oklahoma.

It has been suggested that OSMA sponsor a chair in Continuing Medical Education, however, this would be a deviation from traditional medical school endowments which are usually

the specific subject areas or for prestigious and noted faculty. The Council is still studying the matter before making a specific recommendation to the Board and the House of Delegates.

MEDICAL SCHOOL ADMISSIONS BOARD PROCEDURES:

In 1975 there was an attempt made by the Oklahoma Legislature to mandate the composition of the OU College of Medicine's Admissions Board. Certain members of the Legislature and others including physicians, frustrated at the lack of OU graduates practicing in rural and needy areas of the state, felt that the composition of the Board of Admissions discriminated against rural applicants. It was the intent of the legislative proposal to more equitably distribute representation on the board by having physicians selected from the state's judicial districts. OSMA's Medical Center Liaison Committee and the State Legislative Committee countered the legislative proposal with a recommendation that a study group be formed to review the Admissions Board procedure and report to OSMA Officers and the leadership of the state legislature.

The legislative proposal was not passed, but before the OSMA study could commence, the OU Board of Regents voted to enlarge the Admissions Board and to ask OSMA to provide nominees to serve on the Board. The new composition of the Admissions Board is 54 members. 24 members are selected from nominees submitted by OSMA which are divided equally between the state's six congressional districts. 10 members are practicing physicians who hold clinical faculty appointments and 10 members represent the student body.

The President of OSMA was given the responsibility by the Board of Trustees to select the nominees forwarded to the Regents. The 1975 and 1976 OSMA Presidents consulted with county society presidents, trustees, and members of various councils and committees to secure nominees for the 24 positions.

Service on the Admissions Board is no light task. The process of selecting students to fill the limited number of positions is long and arduous and requires weekly interviews and monthly meetings of the Board until the final class is selected. Thus, it is difficult to get a sufficient number of physicians willing to take time to serve on the Admissions Board, especially when one is faced with the geographical restraints.

However, in both 1975 and 1976 a sufficient number was submitted to the Regents to fill the 24 places that are the responsibility of OSMA.

At a recent meeting of the Board of Trustees, it was recommended that the process of selecting physicians to serve on the Board be structured and formalized in a written policy approved by the Board. The Board of Trustees referred the matter to the Council on Medical Education for study and recommendation. The Council has not had an opportunity to review this matter as of this date, but recommends as a part of this report that such a study be undertaken.

FINANCIAL AID TO EDUCATION:

In 1956 the Association began a financial aid program for medical students by dedicating \$5 of each member's dues to a fund used for scholarships to medical students and to provide assistance to students who had financial emergencies. In 1969 the Association created the Oklahoma Foundation for Community Medical Care, whose purpose is to encourage medical school graduates to practice in rural and needy areas of the state. Since the creation of the Foundation, the Financial Aid to Education Committee has routinely transferred the scholarship funds to the Foundation.

The Foundation Board which consists of the 5 immediate past presidents of the Association (the same as the Financial Aid to Education Committee) and 5 lay members grants loans to medical students who sign a contract stating that they will practice in rural areas of the state as designated by the Board. The scholarships are for a maximum of \$5,000 per year and can be repaid by fulfilling the terms of the contract, which essentially is one year of practice in the designated area for each year of support. A more detailed summary of the Foundation's activities is included in a separate report.

RECOMMENDATIONS:

1. That the House of Delegates endorse the AMA's Physician's Recognition Award Program as a requirement for OSMA members, and that a budget of \$5,000 be allotted to the Council.
2. That the OSMA CME Program of surveying and recommending for accreditation by AMA of all qualifying Oklahoma institutions be approved, and active encouragement be given to the process being completed by January 1, 1978.
3. That the cosponsorship of postgraduate seminars by AMA-OSMA, OSMA socio-

economic seminars be approved, and the membership be encouraged to participate. No expenses are recommended as these programs will require a tuition for attendance.

4. That the House of Delegates endorse the OSMA Liaison with the new coordinator of continuing education of OUHSC, and support the Council's proposal for creating a central clearing house for CME courses in the state and the setting up of a calendar of events.

5. This Council is still studying the medical school endowment and is not ready to make a recommendation at this time.

6. It is also recommended that the items concerning the Medical School Admissions Board procedures and Financial Aid to Education continue to be studied in preparation of a report to the Board of Trustees.

Respectfully Submitted,
Floyd F. Miller, MD, Chairman

Irwin H. Brown, MD
David E. Browning, Jr., MD
Ralph L. Buller, MD
Wallace Byrd, MD
John W. Drake, MD
Norman Haug, MD
Howard B. Keith, MD
James D. Loudon, MD
John M. Moore, MD
Wendell L. Smith, MD
William R. Smith, MD
Harry B. Tate, MD
William G. Thurman, MD
Hal Vorse, MD
Kenneth W. Whittington, MD

Report of the
EDITORIAL BOARD OF *THE JOURNAL*
OF THE OKLAHOMA STATE MEDICAL
ASSOCIATION

May 4-6, 1977
(APPROVED AS AMENDED)

The Editorial Board of *The Journal of the Oklahoma State Medical Association* met this year to review the OSMA's long-standing policy of producing a monthly scientific magazine and to consider business items and editorial matters associated with *The Journal*. The OSMA has supported a scientific journal since statehood, but due to the changing environment for state medical journals, the Editorial Board thought it necessary to once again review this policy (printing costs have risen substantially and

advertising is down for nearly all journals of this type).

After careful consideration, the Editorial Board agreed that *The Journal of the Oklahoma State Medical Association* was an integral part of the medical association's communications program and that it should be continued. It was further agreed that *The Journal* is a membership benefit, and when considering the cost of producing this publication, it should be viewed as such.

The Journal's format, its business policies, and its editorial content were also reviewed. Due to increased competition in the medical journal field, national advertising has diminished substantially, and there is stiffer competition for quality scientific articles. The Editorial Board of the Oklahoma State Medical Association makes the following recommendations in order to improve both *The Journal's* format and content and its financial status.

*The Editorial Board recommends that due to its wide acceptance, an increased number of history of medicine articles be carried by *The Journal*. The board also suggests that junior and senior medical students be encouraged to submit articles for publication, and that use of a professional writer for socioeconomic articles be adopted. (A proposal for the free-lance writer is included in the report of the Council on Professional and Public Relations. It is anticipated that the cost for a free-lance writer will be \$2,000 per year.)

*The Editorial Board endorses the concept of increased local advertising and recommends that a part-time advertising salesman be contacted. The Board further recommends that this salesman be paid on a strict commission basis and that the Editor-in-Chief retain absolute authority to accept or reject ads on the basis of medical ethics. (A similar recommendation may be found in the report of the Council on Professional and Public Relations.)

*The Editorial Board recommends that subscription rates for *The Journal of the Oklahoma State Medical Association* be reviewed in order to determine if any adjustment is necessary.

*The Editorial Board endorses the proposed change in OSMA bylaws which would allow either the Executive Director or his appointee to serve as business manager of *The Journal*. (The proposed bylaws change may be found in the report of the Constitution and Bylaws, Section C.)

*The Editorial Board endorses the recom-

mendation of the Council on Professional and Public Relations that more emphasis and space be given to the news section of *The Journal* and that increased number of socioeconomic stories be carried. The Editorial Board feels this would enhance readership of *The Journal* and would serve to make it the principal communications tool of the state medical association.

Note: In several instances, the recommendations of the Editorial Board are the same as the recommendations of the Council on Professional and Public Relations.

Respectfully submitted,
Mark R. Johnson, MD, Editor-in-Chief

Editors: Harris D. Riley, Jr., MD
Robert G. Tompkins, MD
Ernest Lachman, MD

Report of
PRESIDENT-ELECT
May 4, 1977
(APPROVED)

Mr. Speaker, Doctor Nesbitt, Doctor Welborn, members of the House of Delegates, fellow physicians and friends:

I look forward to serving you as President of the Oklahoma State Medical Association in the coming year with eagerness. I am following an outstanding President, Orange Welborn, who has served our association exceedingly well over the past year. Through an investment of an incredible amount of his personal time and effort, to the point of personal sacrifice, he has shepherded a very workable restructuring of the Oklahoma State Medical Association into a more viable organization which can better serve the physicians and the people of Oklahoma. I am personally grateful to him for his counsel and advice during my orientation period as President-Elect. I want, at this time, to express my appreciation to Orange.

Several people have asked me what I foresee as the theme for the Oklahoma State Medical Association for the coming year. I would like to suggest that our theme be "Better Patient Care" for our current and future patients and I encourage each and every one of you to adopt this as our major goal. After all, that's really what we're all about.

When I think of better patient care, I think in terms of three areas of activity. First, continuing training and education of physicians. Our medical education begins in medical school, continues through postgraduate training and then through all of our active physician life. The second ingredient is a good climate for physician-patient relationship which is bolstered by standards of excellence of practice, improved patient education, and adequate malpractice protection for all concerned. The third aspect that I wish to emphasize is the need to protect the freedom of the medical care system which we enjoy in the United States, including the unique American concept of the community hospital staffed by practicing physicians who work in both the community hospitals and their private offices. We are the only nation on earth with this system and our country cannot afford to lose it.

We are blessed by a strong Oklahoma State Medical Association. We have an excellent professional staff that is now full-strength to meet the challenges of a responsible program. The 2,600 physician members, a great number of whom, like you, spend many hours working for better patient care through the activities of the Oklahoma State Medical Association, are our greatest asset. Our wonderful wives through the auxiliary, bolster and extend the efforts of the association in many ways, and we are forever grateful for their contributions.

During the past year, while attending national medical meetings such as the American Medical Association, the American College of Physicians Board of Governors and the American Board of Internal Medicine, I have found that a number of Oklahoma State Medical Association programs are recognized as outstanding in the medical arena and have gained national reputation. These programs include our malpractice rate structure and new malpractice legislation, the Oklahoma Utilization Review Pilot Study and the Physician Manpower Training Commission, which provides increased support for medical education through community matching scholarship programs, a rural scholarship program and a resident support program. Frankly, it's very pleasant to see Oklahoma medicine recognized by many as leading the way in many areas. I am proud of what this organization has done in the past and look forward to what we can accomplish in the future. I solicit your ideas and suggestions, and I hope you will write to me. There

are some things, that we do, that you will think are good and there are some that you will think are bad. Anything that you think is good, I would like for you to write me about. Anything that you think is bad, get in touch with David Bickham.

There are a few recommendations that I would like to make based on recommendations from various Councils and Boards.

One, the OSMA should continue to study the viability of organizing a captive insurance company for the purpose of writing basic malpractice insurance coverage.

Two, the Council on Professional and Public Relations should be encouraged to implement the program that it is proposing in order to improve medical-public relations. Included in this program is a membership brochure which I believe would be most helpful in bridging the communication gap with our own membership.

Three, the Association should continuously encourage participation by Oklahoma medicine in formal health care planning, particularly through the Oklahoma Health Systems Agency and the State Health Coordinating Council. The importance of our role in health care planning cannot be overstated.

Four, the proposal to employ a Washington consultant on a trial basis should, in my opinion, be approved. I believe this will provide OSMA with much needed liaison with the Washington legislators, greatly stimulate the availability of responsible information, and give us a mechanism for improving our own efforts in the effective lobbying at the national level. A reasonable trial period should indicate the value of this project. The periodic health forums featuring a member of the Oklahoma Congressional Delegation as the speaker, which have been recommended by the Council on Governmental Activities, should have great potential.

Five, the Oklahoma State Medical Association should move ahead with its proposed program of continuing medical education requirements for membership. This will require a great deal of time from all of us but will, in my opinion, produce great rewards for us all.

Six, the proposed socioeconomic seminars for physicians during 1977 and 1978 deserve our support.

Seven, the proposed Council on Scientific Assembly should provide a means of strengthening and stabilizing the continuing education

portion of our annual meeting and I strongly support the addition of this council.

This is not intended as an exhaustive list of the possibilities, but rather only the beginning.

As I stated in the beginning, I think we exist and function to care for the health of the citizens of Oklahoma and particularly, for our current and future patients. I pledge to you my time, my energy and what knowledge I have for the coming year and I petition each of you for your help to make our organization, the Oklahoma State Medical Association, an even more viable leader in this medical profession to which we have all devoted our lives.

Thank you.

C. S. Lewis, Jr., MD,
President-elect

Report of the
PRESIDENT
May 4-6, 1977
(APPROVED)

Mr. Speaker, Doctor Lewis, Doctor Nesbitt, members of the House of Delegates, may I first express to you my appreciation for the experience I have had in serving as President of this Association. This has been a most gratifying year for me. Although the duties have been time consuming, sometimes frustrating and even occasionally personally difficult, I look back on this past year with a great deal of pride and a sense of real accomplishment. I am proud of what we have done together and what you, the House of Delegates, our Board of Trustees, the general officers, our executives and our membership have accomplished for medicine in Oklahoma. The major reorganization of the association, which this House approved last year, has now been implemented. Our strong council structure and the assignment of specific responsibilities to those councils has made our association a much more viable force in medicine and has made it more capable of dealing with the problems which face us today. It has also enabled us to serve our profession, our members and our patients in a more meaningful manner. Our system of careful planning and coordination of all activities, as expressed in the report of the Council on Planning and Development, is certainly the first major step in reaching meaningful and attainable goals.

It would be impossible to list all the activities your association became involved in last year. It would be just as impossible to mention each of the changes which have taken place during the last 12 months. It is important, however, to

briefly mention several of the more important developments.

*The association office has been reorganized, and there have been changes in the executive staff. The OSMA office now functions with a written personnel policy, and the building itself has been redecorated to accommodate the Oklahoma Foundation for Peer Review. Our association is not only stronger than ever before, but it also functions more efficiently.

*The Editorial Board of *The Journal of the Oklahoma State Medical Association* has proposed changes to improve *The Journal* and to make it a principal communication tool for our association. Additional recommendations can be found in the Editorial Board report.

*We have strengthened our rapport with the Department of Institutions, Social and Rehabilitative Services, the University of Oklahoma Health Sciences Center, the governor's office and our Health Systems Agencies. We also have a very cooperative relationship with these organizations which will help improve the future of medicine in Oklahoma.

*Our Council on Professional and Public Relations has done a good job so far and has developed a program for next year which deserves your support.

*We have been in close contact with the State Board of Health and the governor's office in reference to Oklahoma's Commissioner of Health, an office which has been vacant for approximately 10 months.

As I said, it would be both impractical and impossible to list and reiterate all the many activities and accomplishments which I feel have been attained during the past 12 months. Most of these items can be found listed and expounded upon in the various council reports. I would, however, like to direct your attention to two other items of primary importance and to introduce them for consideration by this House of Delegates.

ITEM I: Creation of a "Council on Scientific Assembly"

This Council should serve as an umbrella to encompass and enhance the efforts of the many other medical and affiliated organizations within the state. This Council should not only aid those organizations with active scientific programs, but it also should work closely with those organizations too small to put on programs of their own. For example, the American

Academy of Family Physicians and the American College of Surgeons are both quite active and work closely with state chapters in conducting scientific programs. On the other hand, smaller specialty groups, such as those for ophthalmologists or neurosurgeons, may have scientific programs available only on a regional or national basis. An OSMA Council on Scientific Assembly could assist those organizations and help coordinate scientific programs. This would make both quality medical education and quality medical care more available and would benefit both the medical profession and the public.

The implementation of this recommendation would also aid the OSMA's continuing medical education program, which is due to go into effect January 1, 1978. A Council on Scientific Assembly would be a real aid to our Council on Medical Education, which is responsible for overseeing the OSMA's CME program. By centralizing the scientific arm of our association, we can bolster the scientific section of our annual meeting and other medical meetings. At the same time, this council can evolve into a vehicle which will eventually include not only our state medical association but any other organization wanting to conduct worthwhile medical programs. As I see it, the Council on Scientific Assembly would work to become an umbrella offering assistance to all specialty organizations by centralizing and improving these activities. I think this is an important project and I urge you to approve the formation of this Council by adopting this section of this report and by approving the necessary bylaws changes which are outlined in the report of the Constitution and Bylaws Committee, Section D.

ITEM II: Recommendations to strengthen the association's Grievance Committee and medical disciplinary activity.

The medical profession is by far the most esteemed profession in America, in spite of the action of a few errant physicians, and in spite of the distortions and accusations which are frequently made by individuals and groups. We have all heard these accusations for many years, and each of us has been affected by them in one way or another. We can only try to refute those outside our profession and bring the pressure of the American people who trust us to bear upon those who would purposely destroy our credibility. But we can take much more affirmative action on those within the medical pro-

profession whose actions tarnish our image and harm our members.

During the past year a concerted study has been made of the "medical disciplinary problems" which confront both our association and our profession. Each of you is aware of these problems, and I am sure you have been embarrassed by the errant activities of a small number of physicians. I feel a major goal of the medical profession and our association must be to assure the people whom we serve that we are worthy of their trust and we will uphold and preserve that trust, and that we will not tolerate those few among us who violate that trust and bring discredit to our profession.

Our association is almost impotent to deal with justified grievances and complaints against errant, disabled or unworthy physicians. Most other medical associations in this country have recognized this common problem and have taken steps to bolster their grievance mechanisms. Some have resorted to legislative changes in their disciplinary system, and others have designed programs which allow the problem to be solved within the association and profession . . . that is peers judging peers.

In the light of the changes in peer review, medical audits of hospital staffs, recent changes in the authority of the Board of Medical Examiners and the increasing insistence of the public for the medical profession to be accountable for the actions of its members, I feel we should pursue reforms of our system of professional discipline. These reforms, in my opinion, should be made within the Oklahoma State Medical Association rather than through sweeping legislative action.

The details of this program are outlined in an addendum to this report which is hereby submitted to the House of Delegates as a part of my report. It will also be outlined in a more precise manner before the Reference Committee tomorrow, and I sincerely hope this program, or an equally effective program, will be adopted by the OSMA House of Delegates.

I thank you for your attention to these matters of the report, but most of all I thank you for all your help this past year. Without the devoted work of our executive staff and the secretaries of the OSMA, it would have been a much more difficult task. Without the dedicated work of our councils and committees and officers, the past year's accomplishments would have been impossible. I urge you to continue demonstrating the same dedication and devotion

during the coming year and in all years to follow. Thank you very much.

Respectfully Submitted,

Orange M. Welborn, MD, President
Oklahoma State Medical Association

Special Report
of the
PRESIDENT
Orange M. Welborn, MD
May 4-6, 1977
(APPROVED)

INTRODUCTION:

Through the years, as I have become more involved in organized medicine, I have become increasingly alarmed at the inability of the organized medical community to aid and discipline errant physicians. It is my belief that the difference between a profession and an occupation is the willingness, the courage, and the right to protect the public from handicapped professionals. The public, I believe, has some confidence in our ability to do so. The legislatures are frankly dubious.

As President-Elect and President, I became even more concerned. Our Grievance Committee meets infrequently and has little legal authority over the acts of members, much less, over the acts of non-members of the profession. I felt something must be done.

The right of a voluntary association to discipline one of its members through expulsion or suspension is well established in United States law. The right is so well established that in one instance an association was allowed to enforce its disciplinary provisions even though the result would be to eliminate competition. In such actions, however, associations are admonished that their discipline must be reasonable under the circumstances. Accordingly, an association may expel a member for serious misconduct, usually involving dishonesty or action which is critically disruptive of association or professional goals and purposes.

The courts have held that disciplinary matters involving voluntary associations should be conducted in conformity with rules that are available to all persons involved and that are reasonable. Due process requirements necessitate that a member cannot be expelled without first receiving notice of intention to proceed against him, a recital of the charges or accusations, a fair and impartial hearing in which he

may respond to the charges, and, in most instances, being afforded the right to legal counsel.

In a voluntary association of professionals the disciplinary or grievance mechanism has three purposes: Protection of the general public; protection of the profession's good name; and protection of the association itself. In any single instance any one, two or all three of these general purposes may be involved.

The object of this Special Report is to outline a grievance or disciplinary mechanism that may be followed by the Oklahoma State Medical Association in carrying out its responsibility to the public, the profession, and its own members. The plan, as outlined, is a one year experiment to determine if such a grievance mechanism would be more responsive than the current mechanism as outlined in the OSMA Bylaws.

This disciplinary plan, referred to as the Physician Review Panel, does not call for any amendments or additions to current state law, nor to the Constitution and Bylaws of the Association.

The authority to institute the plan is already possessed by the Oklahoma State Medical Association's Board of Trustees via the Bylaws of the Association. To conduct the plan appropriately, it is only necessary for the Trustees to transfer, by resolution, a portion of their authority for one year to the Physician Review Panel. This panel shall consist of the OSMA Grievance Committee as constituted by the Association Bylaws.

TRANSFER OF AUTHORITY:

Chapter V, Section 7.035, of the OSMA Bylaws provides, "The Board of Trustees may penalize any member of the Association who has been found guilty of unprofessional conduct, ethical or organizational violations by: (a) official written reprimand to the member and written notice to the officers of his component medical society; (b) suspension from membership for a fixed period of time; (c) termination of membership; (d) the reporting of gross offenders to the Oklahoma State Board of Medical Examiners; or (e) any appropriate combination of such penalties." The Bylaws then go on to state that whenever it is serving in an appellant capacity, the Board of Trustees "may affirm, reverse or render such judgment as should have been rendered by a component society."

Section 7.032 of that chapter states, "The Grievance Committee of the Association shall be the Investigating Committee of the Board of Trustees on matters involving judicial decision. The Board of Trustees, in its discretion, may refer appropriate complaints or controversies to the Grievance Committee for investigation under the rules governing Grievance Committee procedures; and it shall receive and act upon matters properly brought to its attention by the Grievance Committee. In either instance where the Grievance Committee becomes involved in a problem of original jurisdiction, it shall report its findings and recommendations to the President, and shall prefer and prosecute any charges before the Board of Trustees."

It is proposed that the Board of Trustees instruct the OSMA Grievance Committee, hereinafter referred to as the Physician Review Panel, to conduct its own investigation of possible member discipline situations and then to determine whether or not the situation is serious enough to be reported directly to the Oklahoma State Board of Medical Examiners with an appropriate action recommendation, or whether it should be referred to the OSMA Board of Trustees with an appropriate action recommendation. The Board would be transferring to the panel its right under 7.035 of the Bylaws to report gross offenders to the Board of Medical Examiners.

The transfer of such authority on the part of an elected Board is permissible, provided that the transfer does not extend beyond the term of the Board itself. In the instance of the OSMA Board of Trustees, the transfer of authority could not exceed one year. At the end of a year the composition of the Board will change because of new Trustee elections. An elected body may not delegate authority for a period of time that would bind future elected bodies.

The necessary resolution by the Board of Trustees is marked Exhibit A, attached, and made a part of this report.

PHYSICIAN REVIEW PANEL:

The Physician Review Panel shall consist of the Grievance Committee of the Oklahoma State Medical Association as constituted according to the Association's Bylaws. Prior to this Annual Meeting, 1977, the Grievance Committee has consisted of the last five living Past-Presidents of the Association who are residing in the state. The senior member serves as Chairman.

It has been proposed that the Bylaws be amended to provide that the Grievance Committee shall consist of the last five living Past-Presidents, excluding the Immediate Past-President, who are residing in the state of Oklahoma and the Chairmen of the Council on Medical Services and Council on Members Services, plus two Members-at-Large to be appointed by the President.

The reason for excluding the Immediate Past-President is one of "workload." The Bylaws provide that the Immediate Past-President of the Association shall serve in approximately six different capacities. The anticipated increased workload on the Grievance Committee serving as the Physician Review Panel would work a hardship on the Immediate Past-President.

The addition of the two Chairmen of specific association councils is for increased information purposes. The Council on Medical Services includes the Peer Review Committee of the Association. In the past, many of the complaints filed with the Grievance Committee originated in the Peer Review Committee.

The Council on Members Services is responsible for the Association's insurance benefit programs. The Professional Liability Insurance Program is a source of information regarding possible physician problems.

The two "at-large" members of the committee would assure that the Physician Review Panel is representative of all sections of Association membership. As finally constituted under the Bylaws change, the Committee would consist of nine members.

COOPERATIVE AGREEMENTS:

In order to carry out its extended purpose, it will be necessary for Physician Review Panel to enter into agreements, both formal, and informal, with a series of different organizations, institutions, and agencies. As an example, it would be necessary to have a formal agreement between the panel and the Board of Medical Examiners for the state of Oklahoma. An informal agreement, stressing the current OSMA Bylaws, is necessary between the panel and the various component medical societies. The following items outline each of the agreements necessary and specific topics that must be covered.

A. Board of Medical Examiners

If the purpose of the Physician Review Panel is to extend the Association's grievance or disciplinary mechanism to its logical conclusion,

there must be an agreement between the panel and the Board of Medical Examiners to the effect that the Board will consider recommendations from the panel. The agreement should set out the Board's willingness to consider recommendations, to exercise its subpoena power in the name of the panel, to allow the utilization of its investigative staff by the panel, the necessary confidentiality policy to be observed by all parties, and specific limitations on panel and/or Board authority.

The specifics of this agreement must be worked between the Board and the panel utilizing legal counsel for both entities.

B. Component Medical Societies

The Bylaws of the OSMA require that component societies must report any disciplinary action they take regarding their own members that will affect membership status. In such instances a certified copy of the record is to be transmitted to the OSMA within 30 days of the date a decision is made.

This particular portion of the Bylaws refers only to situations that affect "membership status." It will be necessary for the panel to enter into agreements with the various component societies to receive additional reports; i.e., those dealing with disciplinary problems not resulting in a possible change of membership status.

It should be noted that the resolution of the Board of Trustees delegating review authority contains a request to all component societies to cooperate with the panel.

C. Professional Liability Insurance Company

The vast majority of members of the OSMA are insured through the association sponsored Professional Liability Program of the Insurance Company of North America. This coverage, the reporting procedures, the premiums, and the ultimate benefits were negotiated by the Association in the name of its members. The relationship between the Association and company is based on a joint agreement of mutual aid and support entered into several years ago.

Through its incident reporting system, and subsequent investigations by its own staff, the company may serve as an important source of information to the panel. The agreement between the panel and the company should specify the method for transfer of information, a confidentiality policy to be followed, and possible changes in an insured's status through recommendations from the panel.

Physicians insured are already required to

report possible professional liability incidents. It would not be unreasonable for the insurance company to require its insureds to report any change in hospital privilege status, whether voluntary or involuntary. The amount and type of privilege extended to a physician by a hospital has a direct bearing upon his professional liability risk. It is also an indication of possible problem areas whenever a privilege is removed or restricted.

This agreement must be carefully worked out by competent legal authority representing the Association and the Insurance company.

D. Hospital Information

As stated in section C, above, a change in an individual physician's privilege status in a hospital is an indication of possible problem areas of interest to the Physician Review Panel.

The most immediate source of information regarding privilege change is the hospital staff, itself. The attached resolution of the Board of Trustees requests medical staff assistance by asking that such privilege changes be reported immediately to the Association. Again, this information will be kept confidential and utilized by the Physician Review Panel to identify possible problem areas.

Recognizing that each hospital is autonomous, the panel should be prepared to enter into separate agreements with each medical staff, but utilizing a uniform agreement. At the same time, however, it should seek the aid of Oklahoma Hospital Association's Governing Board to encourage hospitals to voluntarily participate in the plan.

E. Individual Member

Chapter X, Section 4.05 states, "Full cooperation with the Grievance Committee is mandatory upon every member of the Association. Willful failure of a member to communicate satisfactorily with the Committee, willful failure to appear before the Committee when summoned, or disregard of Committee recommendations toward the solution of a problem, shall be considered sufficient cause for the Committee to refer a record of such conduct to the Board of Trustees with recommendations for appropriate disciplinary action."

Under the Physician Review Panel plan, this section of the Bylaws would be utilized to assure individual member cooperation. The only difference would be that the Board of Trustees would, through the attached resolution, trans-

fer authority to the panel to determine whether to refer a problem physician to the Board of Trustees or to the Board of Medical Examiners.

PANEL PURPOSE:

The purpose of the Physician Review Panel would be to hear complaints and grievances filed formally with the Association from any source, and to develop its own sources of information designed to identify problem physicians before formal complaints are filed. The panel may institute its own investigations based on such information sources or on complaints or grievances.

Prior to beginning any investigation, the complaint, grievance, or problem area should be set out in writing by the panel. This writing should state the facts as alleged or actually known by the panel, the source of the information, and the preliminary investigative procedure to be followed by the panel. This statement should then be signed by the presiding member of the panel.

The purpose of such a written statement is to establish, at the outset, the facts as known or suspected, and the parameters of the investigation to be followed. This document will become the basis for a case file on each investigation to be maintained by the panel.

POSSIBLE PANEL ACTIONS:

There are three possible sources of final action for the panel: The OSMA Board of Trustees, the Physicians Committee of the Association, and the Board of Medical Examiners. Following its investigation, if action is indicated, the panel should refer the situation to one of these three sources with a recommendation for action to be taken.

The following is a brief explanation of possible actions and sources:

A. OSMA Board of Trustees

After its investigation, if the panel feels that it would be in the best interest of the profession and the Association, it may recommend to the OSMA Board of Trustees that the physician's membership be terminated, suspended for a definite period of time, or that he be publicly reprimanded through official written notice to himself and the officers of his component medical society. Each of these penalties is set out in Section 7.035 of Chapter V, cited at the beginning of this report.

If the panel feels that one of these actions is indicated, it should be prepared to prosecute the case before a meeting of the Board of Trustees as

specified in Section 4.07, Chapter X, of the Bylaws.

B. Physicians Committee

In the event the panel's investigation reveals a situation that does not justify a termination or suspension of membership, it may avail itself of the services of the Physicians Committee of the Association. This Committee is established by Section 6.00, Chapter X, of the Bylaws. The Physicians Committee is comprised of at least six members appointed for staggered terms of three years each by the Association's President and approved by the Board of Trustees.

The duties of the Physicians Committee are found in Section 6.01, as follows: "The Committee shall make itself available to counsel with physician-members who are having personal, professional, mental, or physical problems of a significant nature. Such counseling shall be unofficial and shall not be considered disciplinary. Physician-members of the Association may request such counseling, or the Committee, at the recommendation of *another association committee*, council, physician-member, or component society, may offer to counsel with a physician-member. Counseling sessions are to be considered privileged and no written record or minutes will be taken."

It is obvious that a physician-member of the Association must volunteer for counseling by the Physicians Committee. If the review panel feels such counseling would be helpful, a referral to the Physicians Committee should be made. If the physician-member does not wish to participate in counseling, the panel must consider a prosecution before the OSMA Board, or referral of the situation to the Board of Medical Examiners.

C. Board of Medical Examiners

It is possible that the investigation of the panel shall reveal that a physician is actually a danger to the general public and/or the profession because of his unprofessional, criminal, or negligent acts. In such event, the panel should file formal charges and prosecute the case before the Oklahoma Board of Medical Examiners. Subsequently, the panel will be subject to the procedure rules and regulations of the Board.

If a physician's conduct is such to require attention by the Board of Medical Examiners, the panel may wish to recommend that his license to practice medicine be revoked, suspended, limited or that he be allowed to practice only under supervision.

The statutes of the state of Oklahoma, 59 O.S. Sec. 503, state that the Board of Medical Examiners "may suspend or revoke the license or certificate of any physician or surgeon . . . for unprofessional conduct, but no such suspension or revocation shall be made until such licensee be cited to appear for hearing . . ." The statute contains 16 different definitions of the phrase "unprofessional conduct." While most of the definitions are very specific, number 16 states, "The inability to practice medicine with reasonable skill and safety to patients by reason of age, illness, drunkenness, excessive use of drugs, narcotics, chemicals, or any other type of material or as a result of any mental or physical condition . . ."

Although none of the 16 definitions specify incompetence or negligence as unprofessional conduct, the Attorney General issued an opinion in September, 1976, as follows: "The Board of Medical Examiners, pursuant to 59 O.S. Supp. 1975, Sec. 509, can suspend or revoke the license of any physician or surgeon for *incompetence or negligence*."

The law of the state does not specifically state that the Board of Medical Examiners may limit licensure or require practice under supervision. However, these actions are available to it as a part of the right to totally revoke or suspend licensure. The physician would be asked to "voluntarily" limit his license or practice under supervision. The alternative would be to suffer revocation or suspension.

The panel is cognizant of the fact that any case taken to the Board of Medical Examiners will require a formal hearing, the revelation of all pertinent material, the giving of formal testimony, and the availability of legal counsel to all parties. In such an event the activities become public record and subject to publication by the news media.

PANEL STATUTORY PROTECTION:

In 1975 the following statute was added to the laws of the state of Oklahoma. It is found in Title 76 O.S. Section 16, and is entitled "Protection for Certain Committees While Performing Peer Review."

"No member of a peer review committee, professional standards review committee, or utilization review committee which is duly constituted by any voluntary dental or medical society or association which is affiliated with the American Dental Association or the American Medical Association or any other committee or

society or association thereof, whose function is to review complaints concerning services, fees, payments, or utilization in the best interest of the public, shall be deemed liable in damages to any person for any action taken or recommendations made within the scope of the function of such committee, if such committee members act without malice and such action or recommendation is warranted by the facts known to them, after a reasonable effort to obtain said facts. Provided the exemption from liability herein established shall not apply to statutory licensing boards, including, but not limited to, the Board of Governors of Registered Dentists and the Board of Medical Examiners."

A Physicians Review Panel as defined in this report, is a "Peer Review Committee" as that phrase is used in this law. The scope of the investigation cited as, "complaints concerning services, fees, payments, or utilization . . .", appears broad enough to cover all of the anticipated functions of the panel.

Even if it is not, as a general rule the courts will not review the action taken by a medical society as to its internal affairs, except where its authority has been transcended or where fraud or injustice has been perpetrated. In addition, the courts have held that a member must resort to and exhaust all remedies provided by the society before he can apply to the court for relief.

So long as the panel is exercising its option and requesting action from the OSMA Board or by reference of the case to the Physicians Committee, it is carrying out an Association function. So long as it is not being arbitrary or capricious, or damaging the subject in some manner, the courts are reluctant to interfere.

Once the panel determines that it is necessary to refer the case to the Board of Medical Examiners, its activities and actions come under the legal requirements for the functioning of the Board. Actions from that point on will be dictated by other statutes and regulations and will require the aid of legal counsel.

EXPECTED RESULT:

Although it is not possible, at this time, to predict the outcome of this year-long experiment in medical discipline, certain results can be expected.

The publicized availability of any grievance mechanism almost invariably results in a higher utilization of the mechanism. Latent frustrations and grievances are exposed or be-

come more active whenever the availability of a mechanism to handle them is made known or discovered.

As the source of information regarding potential physician problems are developed, there should be an increase in the investigations conducted by the panel. In the past, time, distance and a lack of communications channel has resulted in the inadvertent concealment of problems until they develop to a level that generate public knowledge. At such a point in time it was usually too late for professional intervention for remediation purposes.

If in fact there have been grievances that in the past have gone unnoticed or unresolved, the panel must be cognizant of its purpose and the impact its actions may have on the overall public relations of the profession and the association. It is interesting to note that the mere existence of a formal grievance mechanism, in itself, is an invaluable public relations tool.

RECOMMENDATION:

It is recommended that the House of Delegates approve the disciplinary process as set forth herein and the Board of Trustees be authorized to transfer authority to the Grievance Committee as is described in this report.

Report of the
SECRETARY-TREASURER
May 4-6, 1977
(APPROVED)

The Association's fiscal year has been changed from June 1-May 31 to April 1-March 31. The purpose of the change is to provide the Delegates with an accurate picture of the Association's financial condition so that financial decisions made during the annual meeting are made on the basis of actual audit reports rather than preliminary figures. The 1976-77 reports (attached) reflect "annualized" data since this year's fiscal year is two months shorter than normal.

Membership dues, the principal source of income for the Association, has a consistent trend over the past five years and the income for 1977 continues that trend. The \$264,500 collected is slightly less than the \$281,000 collected last year, but it should be noted that the 1976 figures of \$281,000 include an additional two months of dues income. According to our records, there are 168 OSMA members who have

not paid their dues for 1977. Collection of dues from these members plus the new applications that should be received during the year will achieve or exceed the membership income collected last year.

The Association has had a rather unstable year as far as expenses go. The changes in personnel and renovation of the OSMA headquarters have resulted in a variation in expenses not anticipated when the budget was projected last year, however, the Association has operated in a fiscally sound fashion with a net surplus for 1977 of approximately \$14,800. *The OSMA Journal's* revenue and expenses continue to be out of balance due largely to the declining interest of national drug manufacturers. The FDA restrictions on the marketing of new drugs have helped contribute to this income problem. The Editorial Board is making some specific recommendations that will hopefully bring the income and expense in a better relationship, and our accountants have recommended that a greater portion of the dues income be allocated to *The Journal* account. This "in-house transfer" will not affect the overall income and expense picture of OSMA, but will enhance the financial posture of *The OSMA Journal*.

The OSMA Directories, finished early in this calendar year, have been marketed and well received. Advertising was up substantially from the previous year and sales are greater than the past. However, because of the increased cost of production and printing, the decision has been made to print the directory only once every two years rather than annually. The net result being an increase in income for 1977, but little income projected for 1978.

As mentioned in other reports, the Association has entered into a contract with the Oklahoma Foundation for Peer Review, which provides OSMA with additional revenue; but, the renovation expenses incurred last year exceed the expected income from OFPR.

The report of the Council on Planning and Development proposes a series of recommendations that would increase OSMA expenditures significantly over the 1977 expenses. After a normal adjustment for inflation costs, it is expected revenues will not sustain all of the programs recommended by the various councils. On the other hand, some of the expenses are not and may not be recurring and therefore the long-range expense projections of the Association might be reduced if all the projects are not continued past 1978. It is therefore the recom-

mendation of the Council on Planning and Development and the Audit and Budget Committee that the projected deficit for 1977-78 be funded from the Association reserves. The Secretary-Treasurer is confident after discussions with the auditors that the transfer of reserves to the operating fund will not adversely affect the association's financial operations.

RECOMMENDATION:

The Secretary-Treasurer concludes that the Association is solvent and sufficient reserves are on hand to finance the projected deficit for 1977-78 and that no dues increase be initiated for next year, unless projects other than those recommended by the Association's Councils are adopted by the Delegates.

House of Delegates

Oklahoma State Medical Association
Oklahoma City, Oklahoma

We have examined the balance sheet of the various funds of the Oklahoma State Medical Association as of March 31, 1977 and May 31, 1976 and the related statements of revenue and expenses — Operating Fund, changes in fund balances and changes in financial position — Operating Fund, for the ten months ended March 31, 1977 and the year ended May 31, 1976. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The Oklahoma State Medical Association does not provide for depreciation on buildings, as is required by generally accepted accounting principles.

In our opinion, except as noted in the preceding paragraph, the financial statements referred to above present fairly the financial position of the Oklahoma State Medical Association as of March 31, 1977 and May 31, 1976 and the results of its operations for the ten months ended March 31, 1977 and the year ended May 31, 1976 in accordance with generally accepted accounting principles applied on a consistent basis.

Moak, Hunsaker & Rouse

**OKLAHOMA STATE MEDICAL
ASSOCIATION
BALANCE SHEET
MARCH 31, 1977 AND MAY 31, 1976**

	MARCH 31, 1977	MAY 31, 1976
ASSETS		
OPERATING		
CURRENT ASSETS		
Cash	\$ 58,521	9,947
Savings accounts	287,507	176,649
Certificates of deposit	50,000	52,389
Accounts receivable	11,745	105,170
Interest receivable	1,142	782
Prepaid expenses	1,572	3,199
Total Current Assets	<u>410,487</u>	<u>348,136</u>
PROPERTY AND EQUIPMENT – Note 1		
Land	7,808	7,808
Building	213,592	207,248
Paving	2,451	2,451
Furniture, fixtures and equipment	57,732	39,914
Automobile	–	7,400
	<u>281,583</u>	<u>264,821</u>
Less: Accumulated depreciation	31,278	28,951
	<u>250,305</u>	<u>235,870</u>
OTHER ASSETS		
Cash in bank — Pension Fund	170	179
TOTAL OPERATING FUND	<u>660,962</u>	<u>584,185</u>

NONOPERATING		
BUILDING MAINTENANCE FUND – Note 3		
Cash	4,236	–
Due from Operating Fund	3,640	4,119
TOTAL BUILDING MAINTENANCE FUND	<u>7,876</u>	<u>4,119</u>
SPECIAL ASSESSMENT FOR PUBLIC EDUCATION FUND – Note 4		
Due from Operating Fund	42,750	55,004
TOTAL SPECIAL ASSESSMENT FOR PUBLIC EDUCATION FUND	<u>42,750</u>	<u>55,004</u>
PROFESSIONAL LIABILITY STABILIZATION FUND – Note 5		
Cash	166	–
Savings account	3,705	8,741
Certificate of deposit	210,000	200,000
Accrued interest receivable	5,709	–
TOTAL PROFESSIONAL LIABILITY STABILIZATION FUND	<u>\$ 219,580</u>	<u>208,741</u>

The accompanying letter and notes are an integral part of this statement.

EXHIBIT A		
	MARCH 31, 1977	MAY 31, 1976
LIABILITIES AND FUND BALANCE		
FUND		
CURRENT LIABILITIES		
Accounts payable	\$ 65,724	24,419
Due to Building Maintenance Fund	3,640	4,119
Due to Special Assessment for Public Education Fund	42,750	55,004
Scholarship and Loan Fund payable	5,346	5,149
Accrued payroll taxes	2,288	897
	<u>119,748</u>	<u>89,588</u>
DEFERRED INCOME – Notes 1 and 2	221,108	185,682
FUND BALANCE – Exhibit C	320,106	308,915
TOTAL OPERATING FUND	<u>660,962</u>	<u>584,185</u>
FUNDS		
BUILDING MAINTENANCE FUND – Note 3		
Fund balance — Exhibit C	7,876	4,119
TOTAL BUILDING MAINTENANCE FUND	<u>7,876</u>	<u>4,119</u>
SPECIAL ASSESSMENT FOR PUBLIC EDUCATION FUND – Note 4		
Fund balance — Exhibit C	42,750	55,004
TOTAL SPECIAL ASSESSMENT FOR PUBLIC EDUCATION FUND	<u>42,750</u>	<u>55,004</u>
PROFESSIONAL LIABILITY STABILIZATION FUND – Note 5		
Fund balance — Exhibit C	219,581	208,741
TOTAL PROFESSIONAL LIABILITY STABILIZATION FUND	<u>\$ 219,581</u>	<u>208,741</u>

EXHIBIT B

**OKLAHOMA STATE MEDICAL
ASSOCIATION
STATEMENT OF REVENUES AND
EXPENSES – OPERATING FUND
FOR THE TEN MONTHS ENDED
MARCH 31, 1977
AND THE YEAR ENDED MAY 31, 1976**

	MARCH 31, 1977	MAY 31, 1976
FROM OPERATIONS		
Revenues —		
Membership dues	\$ 264,547	281,570
Interest and commissions	13,319	14,019
Building lease income	5,910	3,850
Tour income	–	3,512
Membership directory	11,503	1,261

Miscellaneous	1,783	1,763
	<u>297,062</u>	<u>305,975</u>
Expenses —		
General membership—Schedule 1	179,617	191,752
Depreciation — Note 1	3,715	4,899
Councils and committees	5,191	2,377
Student Loan Fund	7,500	11,500
In-state travel	4,379	2,497
Out-of-state travel	20,524	27,969
Oklahoma Health Careers — Dues	—	2,000
OSMA Newsletter	1,369	2,203
Commissions to county societies	3,475	3,521
Membership directory	13,116	3,424
	<u>238,886</u>	<u>252,142</u>
	<u>58,176</u>	<u>53,833</u>
<i>JOURNAL</i>		
Revenues —		
Subscriptions allocated from dues	3,500	3,500
Advertising and subscriptions	<u>23,407</u>	<u>23,399</u>
	26,907	26,899
Expenses — Schedule 1	<u>61,318</u>	<u>70,136</u>
	<u>(34,411)</u>	<u>(43,237)</u>
<i>ANNUAL MEETING</i>		
Revenues —		
Summit reimbursement	(84)	4,407
Expenses — Schedule 1	<u>8,850</u>	<u>9,995</u>
	<u>(8,934)</u>	<u>(5,588)</u>
Excess of Revenues Over Expenses —		
Exhibits C and D	<u>\$ 14,831</u>	<u>5,008</u>

The accompanying letter and notes are an integral part of this statement.

EXHIBIT C

OKLAHOMA STATE MEDICAL
ASSOCIATION
STATEMENT OF CHANGES IN
FUND BALANCES
FOR THE TEN MONTHS ENDED
MARCH 31, 1977
AND THE YEAR ENDED MAY 31, 1976

	MARCH 31, 1977	MAY 31, 1976
<i>OPERATING FUND</i>		
Balance—Beginning of period	\$308,915	308,026
Excess of revenues over expenses —		
Exhibit B	<u>14,831</u>	<u>5,008</u>
	323,746	313,034
Funds transferred to the Building		

Maintenance Fund—Note 3	(3,640)	(4,119)
Balance—End of period—Exhibit A	<u>320,106</u>	<u>308,915</u>
<i>BUILDING MAINTENANCE FUND—Note 3</i>		
Balance — Beginning of period	4,119	—
Interest earned	<u>117</u>	<u>—</u>
	4,236	—
Transfer from Operating Fund	<u>3,640</u>	<u>4,119</u>
Balance—End of period—Exhibit A	<u>7,876</u>	<u>4,119</u>
<i>SPECIAL ASSESSMENT FOR PUBLIC EDUCATION FUND — Note 4</i>		
Balance — Beginning of period	55,004	—
Excess of revenues or (expenses) —		
Schedule 2	<u>(12,254)</u>	<u>55,004</u>
Balance — End of period — Exhibit A	<u>42,750</u>	<u>55,004</u>
<i>PROFESSIONAL LIABILITY STABILIZATION FUND — Note 5</i>		
Balance — Beginning of period	208,741	—
Excess of revenues — Schedule 2	<u>10,840</u>	<u>208,741</u>
Balance — End of period —		
Exhibit A	<u>\$ 219,581</u>	<u>208,741</u>

The accompanying letter and notes are an integral part of this statement.

EXHIBIT D

OKLAHOMA STATE MEDICAL
ASSOCIATION
STATEMENT OF CHANGES IN
FINANCIAL POSITION—
OPERATING FUND
FOR THE TEN MONTHS ENDED
MARCH 31, 1977
AND THE YEAR ENDED MAY 31, 1976

	MARCH 31, 1977	MAY 31, 1976
<i>FUNDS PROVIDED</i>		
From operations —		
Excess of revenues over expenses—		
Exhibit B	\$ 14,831	5,008
Add: Expenses not requiring outlay of working capital in the current period —		
Depreciation — Note 1	<u>3,715</u>	<u>4,899</u>
Funds Provided from Operations	18,546	9,907
Retirement of property and equipment	6,012	1,921
Decrease in other assets	9	—
Increase in deferred income	<u>35,426</u>	<u>45,644</u>
	<u>59,993</u>	<u>57,472</u>

news

FUNDS APPLIED

Purchase of plant and equipment	24,162	12,441
Increase in other assets	—	74
Transfer to Building Maintenance Fund	3,640	4,119
Increase in working capital — Below	32,191	40,838
	<u>59,993</u>	<u>57,472</u>

INCREASE (DECREASE) IN WORKING CAPITAL

Current assets —		
Cash	48,574	(12,901)
Savings accounts	110,858	20,331
Certificates of deposit	(2,389)	6,636
Accounts receivable	(93,425)	28,775
Interest receivable	360	93
Prepaid expenses	(1,627)	618
	<u>62,351</u>	<u>43,552</u>
Current liabilities —		
Accounts payable	(41,305)	57,666
Due to Building Maintenance Fund	479	(4,119)
Due to Special Assessment for		
Public Education Fund	12,254	(55,004)
Scholarship and Loan Fund payable	(197)	(1,041)
Accrued payroll taxes	(1,391)	(216)
	<u>(30,160)</u>	<u>(2,714)</u>
Increase in Working Capital—		
Above	\$ <u>32,191</u>	<u>40,838</u>

The accompanying letter and notes are an integral part of this statement.

OKLAHOMA STATE MEDICAL ASSOCIATION NOTES TO THE FINANCIAL STATEMENTS MARCH 31, 1977 AND MAY 31, 1976

(1) Accounting Policies —

The following is a summary of certain significant accounting policies followed in the preparation of these financial statements.

Property and equipment —

Property is recorded at cost. Depreciation over the estimated useful lives of the property, except building, is determined on the straight-

line basis. Depreciation is not provided on the building.

Deferred income —

Dues and *Journal* advertising receipts are prorated over the calendar year to which they apply.

(2) Deferred Income —

The following is a summary of deferred income as of March 31, 1977 and May 31, 1976:

	<u>March 31, 1977</u>	<u>May 31, 1976</u>
Dues	\$219,017	184,186
<i>Journal</i> advertising	<u>2,091</u>	<u>1,496</u>
	<u>\$221,108</u>	<u>185,682</u>

(3) Building Maintenance Fund —

On August 10, 1975, the Board of Trustees directed that a Building Maintenance Fund be created. At the end of each fiscal year, 25 percent of the net operating revenues for each period retroactive to May 31, 1975, is to be transferred to this Fund. The following is a summary of amounts to be transferred for each period:

	<u>March 31, 1977</u>	<u>May 31, 1976</u>
Year ended May 31, 1975	\$ —	2,867
Year ended May 31, 1976	—	1,252
Ten months ended		
March 31, 1977	<u>3,640</u>	<u>—</u>
	<u>\$ 3,640</u>	<u>4,119</u>

OKLAHOMA STATE MEDICAL ASSOCIATION NOTES TO THE FINANCIAL STATEMENTS MARCH 31, 1977 and MAY 31, 1976

(4) Special Assessment for Public Education Fund—

During the fiscal year ended May 31, 1976, the Board of Trustees authorized the amounts collected from special assessments to be transferred to this newly created fund.

(5) Professional Liability Stabilization Fund—

The Professional Liability Stabilization Fund

was established during the fiscal year ended May 31, 1976 by assessing the doctors a 15 percent additional charge on their basic professional liability policy. This Fund will be under OSMA control but will be reserved to pay claims in the event that Insurance Company of North America coverage is cancelled and all established reserves of the insurer are exhausted.

(6) Change in Fiscal Year End—

Effective in the current period, the Association has changed its fiscal year end from May 31 to March 31. All income and expense shown in the current period are for ten months.

(7) Insurance Trust—

OSMA is currently in the process of forming a separate trust to cover malpractice losses in excess of \$100,000 and less than \$1,000,000 that exceed \$3.25 million per year. Lloyd's of London will cover the losses in this range up to an aggregate of \$3.25 million. At March 31, 1977, the money on deposit which will be deposited in the trust upon its legal formation was approximately \$869,000.

House of Delegates
Oklahoma State Medical Association
Oklahoma City, Oklahoma

The accompanying proposed budget for the fiscal year ending March 31, 1978 was prepared by us based upon assumptions furnished by the management or as explained in the notes to the report. The comparative data presented for prior periods was obtained from audit reports and the books and records of the Association.

Since the proposed budget is a projection of future events, we cannot express an opinion on its fairness, nor can we vouch for the accuracy of the forecasts.

Moak, Hunsaker & Rouse

OKLAHOMA STATE MEDICAL
ASSOCIATION
PROPOSED BUDGET
FOR FISCAL YEAR ENDING
MARCH 31, 1978

(With Comparative Data for Prior Two Years)

	Fiscal Year ended May 31, 1976	* Annual- ized as of March 31, 1977	Proposed Budget Fiscal year ended March 31, 1978
INCOME			
Dues—Note 1	\$270,068	308,456	326,450

Journal—			
Subscription—Note 1	3,500	3,500	11,875
Sales	1,010	990	1,000
Advertising	22,389	27,098	28,000
Interest and commissions	10,498	11,813	10,700
Rents	3,850	7,092	8,150
Directory—Adv. and sales	1,261	13,804	3,500
Annual meeting	4,407	(101)	2,000
Hawaii trip	3,512	—	—
Other	1,763	2,140	100
Total Income	322,258	374,792	391,775

EXPENSES—Note 2

Administrative expenses	221,768	250,386	257,825
Journal	48,608	47,777	72,825
Out-of-state travel	27,969	24,629	26,600
In-state travel	2,497	5,255	5,675
Directory	3,003	15,739	2,500
Council and committee activities	4,779	7,872	8,525
Dues	3,727	1,579	3,700
Depreciation	4,899	4,458	5,000
Total Expenses	317,250	357,695	382,650
**Excess of Income Over Expenses	\$ 5,008	17,097	9,125

* Annualized ten months operating as of March 31, 1977.
** Excess before any transfers of funds to the Building Maintenance Fund.

OKLAHOMA STATE MEDICAL
ASSOCIATION
NOTES EXPLAINING ASSUMPTIONS
TO THE PROPOSED BUDGET
FOR THE FISCAL YEAR ENDING
MARCH 31, 1978

(1) For the years 1975 through 1977, the dues-paying members increased from 2,077 to 2,276, or about a 100-member increase per year. It is projected that an additional 100 members will be added ratably over the year, resulting in an average of six months dues to be received from each new member. In addition, it is projected that 150 junior members will pay dues of \$10 each.

Annually, part of the dues is allocated to the Loan and Scholarship Fund and to revenue from *The Journal*. The latter amount has been a fixed \$3,500 each year. It is proposed that this be changed to \$5 per dues-paying member, as nonmembers are charged \$6.50 per subscription.

The following is a summary of the proposed revenue from dues and the allocations therefrom:

Regular members—	
2,275 at \$150 each	\$341,250
New members—	

news

100 at \$75 each—½ year average	7,500
Junior members—	
150 at \$10 each	1,500
Total	350,250

Allocations—

To Loan and Scholarship		
Fund	11,925	
To <i>Journal</i> revenue	11,875	23,800
Dues		<u>\$326,450</u>

(2) Expenditures are projected based upon an 8 percent inflation factor applied to the annualized amounts for the ten-month period ended March 31, 1977, except as follows:

(a) Salaries and related payroll taxes—

Salaries are projected to increase by 14 percent with corresponding increases in payroll taxes. Allocation of these expenses has been made to cost of producing *The Journal* based upon estimated time specific personnel will be involved.

(b) Utilities—

Projected to increase 20 percent.

(c) Dues—

Projected to increase \$2,000 in addition to the 8 percent.

(d) Miscellaneous—

Adjusted for auto before applying the 8 percent factor.

(e) Depreciation—

Projected based upon assets to be depreciated, excluding building.

Report of the BOARD OF TRUSTEES

May 4-6, 1977

(APPROVED AS AMENDED)

INTRODUCTION:

Your Board of Trustees has labored long hours on the business of the Association. This report will summarize actions taken at the July 18, October 24, and March 5 meetings. The actions during the final meeting of May 4th will be presented in a Supplemental Report to the House of Delegates on May 6th.

The Executive Committee of the Board has met frequently and has handled many difficult problems. The decisions of the Executive Committee, ratified by the Board, will be incorporated into this Report and the Supplemental

Report to follow, as mandated by the Bylaws change during the last Annual Meeting.

DEVELOPMENT OF THE COUNCIL SYSTEM:

During the preceding organizational year, a great amount of time and energy has been expended in firming up the roles of the newly-developed Councils of the Oklahoma State Medical Association by the Officers, Staff and Council on Planning and Development, largely composed of the various Council chairmen. The Board has been privileged to observe, with satisfaction, the maturation of the Councils into effective planners and doers as the House will observe at this meeting. A Planning Retreat, conducted by the Council on Planning and Development in late October at Shangri-La, was so productive that the Executive Committee has recommended that funding of a similar retreat next fall be included in the Association budget for the Council on Planning and Development.

Accomplishments of the Councils have been made known to and accepted by the Board. Proposed plans for the next year are documented in the Council reports; the Annual Program of Activities proposed by the Board in its Supplemental Report will be based on the recommendations of the Council on Planning and Development presented to the Board of Trustees on May 4th.

ORGANIZATIONAL CHANGES WITHIN OSMA:

Staffing and personnel problems surfaced shortly after completion of the 1976 Annual Meeting. Regretfully, the resignation of the Executive Director, Don Blair, was accepted in September and termination benefits defined. Subsequently, David Bickham was named Acting Executive Director; since November 1st, he has served the Association well as Executive Director. A junior executive, employed last spring, was found to lack the necessary qualities for Association employment and was released in the fall. Ed Kelsay, Executive Director of the Oklahoma Foundation for Peer Review, temporarily devoted part of his time and much of his talent as a part-time Executive for OSMA during the later months of 1976.

Late in the year, the Association employed two new executives, Lyle Kelsey and Richard Ernest, who have rapidly adapted to the Association. Reorganization of Executives' duties earlier this year has resulted in a well-coordinated plan of attention to the multiple responsibilities

of the Association . . . a working team of Bickham, Hess, Kelsay and Ernest of which OSMA can be proud.

The experience and dedication of the secretarial staff, bolstered by new qualified people, were invaluable during the transitions and should become an even greater factor in this and succeeding years under a specific plan of organization and greater responsibilities instituted recently.

DISPOSITION OF AMENDED RESOLUTION 2, ANNUAL MEETING, 1976:

Deliberations concerning voluntary or unified membership, and confusion over the impact of amended Resolution 2 resulted in a decision by the Board of Trustees to call a meeting of the House of Delegates in the fall of 1976, in the interests of clear settlement of a potentially divisive issue. As a result of the decision of the House on October 24, 1976 by a substantial majority, OSMA has retained unified membership.

MALPRACTICE INSURANCE AND THE OSMA PENSION PLANS:

The OSMA professional liability programs commanded the frequent attention of the Executive Committee in latter 1976. Decisions were made which were necessary to implement the programs at moderate premium increases . . . though still the most attractive rates in the U.S. Over 2,800 physicians are now insured under the programs.

The carrier of the basic coverage, Insurance Company of North America, insures no other medical groups; Officers and Staff of OSMA attending the AMA Clinical meeting in Philadelphia last December were hosted by top INA executives. The unique excess limits coverage plan of \$1,000,000, underwritten by the Lloyds' consortium, should result in strengthening the Association's position unless the number of awards in this range exceeds projections. The personal umbrella coverage, negotiated from a position of lack of strength but necessary for a physician to qualify for the \$1,000,000 Lloyd's coverage, and the excess limits malpractice coverage above the \$1,000,000 level have been made available but at higher rates than the Council on Members Services desired.

Close supervision by the Insurance Committee of the Council on Members Services, the unique contract with the primary carrier and the excellent track record made by astute legal defenders, aided in no small measure by OSMA

Staff, has combined to maintain Oklahoma's enviable position in the malpractice field.

The necessity of allowing non-OSMA MDs to purchase coverage in OSMA's program, a decision of the State Insurance Commissioner, has led to the levying of a surcharge of \$420 per year on those non-members, in this and coming years, because of the added difficulties of investigating, monitoring and aiding in defense of physicians over which OSMA has no direct jurisdictionary power. A Class VI designation is being utilized for any physicians whose risk is over and above the rest in the program. Contingency plans exist now for a captive insurance company to be formed that could provide basic coverage, should reversals occur. Negotiations for all levels of malpractice coverage for 1978 are beginning, perhaps with more than one company on each level. Details of the OSMA professional liability programs may be found in the report from the Council on Members Services.

The Board of Trustees has deferred action concerning extending affiliate membership status to Texas medical doctors practicing in Oklahoma border counties and who desire to join the OSMA malpractice program.

The Executive Committee has discussed with the Council on Members Services, in detail, the possible inclusion of Doctors of Osteopathy in OSMA's \$1,000,000 excess limits coverage, a proposal recommended by OSMA's Insurance Counselor, and has offered such coverage under very stringent conditions and with substantially higher premium rates. The Osteopathic Association has not accepted the offer and conditions to this writing.

The Pension Plan for OSMA employees has been redesigned to meet requirements of the new Pension Reform Act. Representatives of both the OSMA Qualified Plan Service Company and the First National Bank and Trust Company, of Oklahoma City, Trustee of the Plans available to OSMA employees and individual or corporate physicians, reported glowing performance in 1976 of both the Pension Equity Fund and the Pension Fixed Income Fund for Retirement Trusts.

OKLAHOMA FOUNDATION FOR PEER REVIEW AND "OURS":

The Board has closely monitored progress of OFPR, specifically the "OURS" program, a largely retrospective program of utilization review. Hillard Denyer, MD, President and Ed

Kelsay, Executive Director of OFPR, have furnished progress reports as the slothful Federal machinery finally fully approved "OURS" in December, 1976 and funded the demonstration project in January, 1977. The "OURS" project has been operational since February 1, 1977, as will be related in greater detail by the report of the Oklahoma Foundation for Peer Review to the House of Delegates.

The Association office building has been effectively expanded by remodeling and reallocation of space to accommodate the Staff of OFPR, leading to a contract for occupancy of 1 year duration to be reconsidered at the termination of the contract. The OFPR move to OSMA premises, accomplished in late 1976, has facilitated continual close cooperation between the two organizations, OSMA and OFPR.

The Board of Trustees has nominated Doctors C. S. Lewis, Jr., Tulsa, Tony Puckett, Oklahoma City, and Fred Switzer, McAlester for reelection to the OFPR Board of Directors and has submitted the name of Raymond L. Cornelison, MD, Midwest City for a fourth MD position on the board being vacated by Scott Hendren, MD, who requested withdrawal.

GOVERNMENT-RELATED ACTIONS AND REACTIONS:

In July, the Trustees deferred action on an informal request from the Regional Office of DHEW, pending receipt of official correspondence and request, concerning appointments of physicians to be selected by the Secretary to serve on Program Review Teams, required under the Social Security Amendments of 1972. Such teams, also composed of consumers and non-physician health care providers, would be asked to prospectively evaluate disenfranchisement of physicians and other health care providers from Medicare, Medicaid and Maternal Health programs. Subsequent to this action, no official correspondence materialized.

The Board of Trustees has encouraged the placement of responsible physicians and sympathetic non-physicians on the State HSA Board and SubArea Councils. Reports received indicate relative success in these endeavors.

The Board received a summary article from S. S. Sanbar, MD, Oklahoma City. The Impact of the Federal Trade Commission Action and Court Decisions On Professional Advertising, and an accompanying request for immediate action to reconsider the ethical constraints

against advertising by physicians. Acting on the advice of counsel, the Board took no action on this proposal, in favor of resolution of the question at the AMA level.

RELATIONS WITH AMERICAN MEDICAL STUDENT ASSOCIATION (AMSA):

The Oklahoma Chapter of AMSA, represented by David Berman, President of the OU Chapter, and David Miller, former member of the AMSA Board, expressed a desire that organized medicine become more goal oriented, describing their MECO (Medical Education Community Outreach) program. MECO is designed to acquaint medical students with small community practice and has been referred to the Council on Members Services for evaluation.

Two AMSA members, partially funded by OSMA to the AMA Clinical Convention in Honolulu, observed both the House of Delegates sessions and the Oklahoma-Kansas caucus.

The Board of Trustees has appropriated funds of \$900 to partly finance three Oklahoma Chapter AMSA Delegates to the 27th Annual Convention of AMSA this spring.

CLARIFICATION OF FUND:

In order to identify and clearly specify the purposes for which money received through a "Voluntary Assessment" in 1975 (initially donated to combat Federal Utilization Review regulations which were later withdrawn) should be used, the Board of Trustees revised and adopted terminology as follows: the Fund was renamed the "Public Education Fund" and the monies contributed to this fund identified as "Voluntary Contributions Toward the Public Education" related to governmental, legislative and bureaucratic regulation over the medical profession and the public.

ANNUAL MEETING, 1978 and 1979:

Continuous liaison has existed since the last House of Delegates meeting which has resulted in a commitment with the Oklahoma City Clinical Society and the Oklahoma Chapter of the Academy of Family Practice to hold Summit '78 in Oklahoma City, May 4-7 or May 11-14, 1978.

The Board of Trustees has recommended that the 1969 meeting of OSMA be held in Tulsa. However, the Board of Trustees has been assigned the responsibility for making arrangements to decide if the "Summit" con-

cept is to be continued; the deadline for this decision being made prior to July 1, 1977.

LIFE MEMBERSHIPS:

Life Memberships have been approved for the following physicians: Lawrence S. McAlister, MD, J. Tinder Woodburn, MD, C. L. Oglesbee, MD, Lee K. Emenhiser, MD, and Port Johnson, MD, all of Muskogee; James W. White, MD, D. L. Edwards, MD, Linus A. Munding, MD, all of Tulsa; Albert Krause, MD, Muskogee; L. H. Becker, MD, Blackwell; Richard Burke, MD, S. R. Shaver, MD, Leonard J. Ellis, MD, Virgil Ray Forester, MD, all of Oklahoma City; Fred W. Sellers, MD, Mangum; Dwight D. Pierson, MD, Mangum; C. N. Talley, MD, Marlow; Joe N. Moxley, MD, Ardmore.

50 YEAR PINS:

A 50 Year Pin was awarded to Agnew Walker, MD, Wewoka.

DUES-EXEMPT PETITIONS:

Dues-exempt petitions were approved for N. C. Gaddis, MD, Sand Springs and Martin J. FitzPatrick, MD, Tulsa.

MEMBERSHIP TRANSFER was granted to Kenneth G. Lowe, MD, at the request of the Garvin County Medical Society.

CORRESPONDING MEMBERSHIP was approved for Leonard J. DeCarlo, MD, now practicing in Arkansas, accompanied by assessment of dues of \$25.00 per year.

MISCELLANY:

The Board of Trustees expressed to R. LeRoy Carpenter, MD, its commendation for the excellent service he provided the State of Oklahoma during his term as Commissioner of Health. The Executive Committee and Staff have maintained an advisory position to the Governor in his selection of a replacement for Doctor Carpenter.

The Board received a report, in detail, of the 1976 Annual Convention of the American Medical Association from AMA Delegates in July.

. . . appointed Edwin E. Rice, MD, to replace Kent Braden, MD, as a Director on the OMPAC Board for the 5th Congressional District.

. . . submitted the names of Joe Horton, MD, Frederick; Carroll Holstead, MD, Kingfisher; and Jack L. Berry, MD, Okarche, for a position on the State Board of Medical Examiners vacated by Doctor Ed Young, El Reno. Subsequently, Doctor Holstead has been appointed by the Governor.

. . . received nominations for the A. H. Ro-

bins "Physicians Award For Community Service" and selected John X. Blender, MD, Cherokee to receive the award at the 1977 House of Delegates meeting.

. . . established an Oklahoma State Medical Association Annual Public Service Award for acknowledgement of a layman for outstanding achievements in support of better medical care in Oklahoma, selected Mr. Lloyd Rader to receive the initial award at the 1977 House of Delegates meeting.

. . . accepted a report by the Constitution and Bylaws Committee of proposed bylaws changes and one possible constitutional amendment at its March meeting, thanked the committee for its work and referred the report back to the Committee.

. . . discussed a possible change of policy concerning interest charges on delinquent accounts of physicians in March, and reaffirmed that OSMA policy would remain congruent with that of AMA, specifically the most recent AMA Judicial Council Opinions.

. . . received a report concerning the Oklahoma Cancer network by G. Bennett Humphrey, MD, Oklahoma City, with commendation, and voted support for the principles presented.

. . . received a report on Arbitration and Screening Panels by S. S. Sanbar, MD, Oklahoma City, referring such report to the Council on Governmental Activities.

. . . endorsed a proposed Phoenix Plan, dealing with organ donation, to be undertaken by the Woman's Auxiliary to the OSMA.

. . . selected Haven W. Mankin, MD, Secretary-Treasurer, as Chairman, Orange M. Welborn, MD, and C. S. Lewis, Jr., MD, as members of the Committee on Appropriations and Auditing.

. . . tabled for further study a request of a \$500 yearly grant-donation, for 3 years, from the American Association of Medical Society Executives and a dues statement of Forum on Medical Affairs, Organization of State Presidents, in the amount of \$150.

The Executive Committee approved \$25 for dues to the Oklahoma Public Expenditures Council and \$70 for dues to the Better Business Bureau.

The Executive Committee provided funding to the Council on Professional and Public Relations from the Public Education Fund for developing and producing public service announcements, participation with the Okla-

homa Educational Television Authority in several short series, and from the General Fund for an increased budget for the membership brochure.

RECOMMENDATION:

1. The Board of Trustees requests approval by the House of Delegates of the actions of the Board herein reported.

Respectfully Submitted,
J. B. Eskridge, III, MD, Chairman

Supplemental Report of the
BOARD OF TRUSTEES
May 4, 1977
(APPROVED)

At the annual meeting of the Board of Trustees, held at 12:00 noon on May 4, 1977, the following actions were taken:

(1) J. B. Eskridge, III, MD, Oklahoma City, was elected Chairman of the Board of Trustees for the next year, and Frank Clark, MD, Ardmore, was elected Vice-Chairman for the next year.

(2) The Board of Trustees affirmed a policy, previously approved by the Executive Committee, that OSMA Executives who attend AMA Annual and Clinical meetings shall be required to have their wives accompany them, unless specifically excused by the President, travel and hotel expenses to be borne by OSMA.

(3) The Board of Trustees accepted an Employee Personnel Policy as developed and recommended by the Executive Committee . . . affirmed dues voted for the Oklahoma Public Expenditures Council and Better Business Bureau . . . affirmed the appropriations to the Council on Professional and Public Relations.

(4) The Board affirmed the results of a mail ballot unanimously endorsing a surcharge (of \$420) to be levied yearly for each non-OSMA member participating in the OSMA professional liability program.

(5) The Board of Trustees received the report of the Committee on Constitution and Bylaws, approved and accepted the recommendation of the Committee.

(6) The Board of Trustees reviewed the Report of the Council on Planning and Development, debated, and thereafter adopted the following motion which is transmitted to the House of Delegates: *"The Board of Trustees approves the Report of the Council on Planning and De-*

velopment by the Council Chairman, Arnold G. Nelson, MD and adopts the Council's recommendations, as amended, of the Annual Program of Activities, including budgetary considerations."

(7) The Board accepted the Report of the Committee on Appropriations and Auditing, recommending the budget for the current fiscal year for approval of the House of Delegates.

(8) The Board of Trustees commended the Editorial Board of *The Journal* and reappointed Harris D. Riley, MD, for a 3-year term on the Editorial Board.

(9) A motion was made to accept all late resolutions for the House of Delegates. Late Resolutions, 6 through 9, were approved for submission to the House, Resolution 10, in appreciation of Doctor Rex E. Kenyon, Oklahoma City, was originated by the Board and is submitted to the House.

(10) The OSMA membership report, as of 4-15-77, was submitted as follows:

Active Members	2,276
Active Dues-Exempt	13
Application Pending	58
Life Members	194
Affiliate Members	18
Honorary Members	0
Junior Members	137
	<hr/>
	2,696

(11) The following physicians were elected to Life Membership in the Association, proposed by component medical societies:

East Central: Lawrence S. McAlister, MD; J. Tinder Woodburn, MD; Albert Krause, MD; C. L. Oglesbee, MD; Lee K. Emenhiser, MD; Port Johnson, MD.

Tulsa County: James W. White, MD; D. L. Edwards, MD; Linus A. Munding, MD; Walter F. Sethney, MD; Lowell L. Stokes, MD.

Kay-Noble County: L. H. Becker, MD.

Oklahoma County: Richard Burke, MD; S. R. Shaver, MD; Leonard J. Ellis, Jr., MD; Virgil Ray Forester, MD.

Jackson County: Willard Holt, MD.

Greer-Harmon: Fred W. Sellers, MD; Dwight D. Pierson, MD.

Stephens County: C. N. Talley, MD; William R. Cheatwood, MD.

Cleveland-McClain County: Iva Merritt, MD; T. A. Ragan, MD.

Carter-Love-Marshall County: Joe N. Moxley, MD.

Comanche-Cotton-Tillman County: G. G. Downing, MD.

(12) The Board accepted Dues-Exemption petitions on behalf of the following: Tulsa County: N. C. Gaddis, MD; Martin J. FitzPatrick, MD.

East Central County: F. R. First, MD.

Cleveland-McClain County: Elizabeth Fleming, MD.

(13) A 50-year pin was approved for the following: Agnew Walker, MD.

(14) An Undue Hardship Application was approved for Jeanne Rainer, MD, Oklahoma City.

(15) The Board of Trustees paid special respect to Tom Nesbitt, MD, Speaker of the House of Delegates of the American Medical Association, who is attending OSMA's annual meeting and will address the assembled delegates.

(16) The Board of Trustees approved the following:

. . . Dues to the Organization of State Medical Association Presidents in the amount of \$150.

. . . Dues to the Oklahoma Council on Economic Education in the amount of \$250.

. . . Dues to the Oklahoma Council for Health Careers in the amount of \$2,000.

. . . Dues to the American Association of Medical Society Executives (AAMSE) in the amount of \$500.

. . . Dues to the Chamber of Commerce of the United States in the amount of \$250.

. . . As a recommendation to the House of Delegates, the Board proposed Tulsa as the meeting site of the Annual Meeting in May, 1979.

For informational purposes, the Board received and declined a request for participation in a counter lawsuit, Scott vs. Duckett-Silverstein, but instructed that Doctor Silverstein be informed that the declination was not because the Board was unsympathetic with the cause, but the legal facts presented did not substantiate OSMA participation in the suit.

. . . The Board received a report of a delinquent dues-paying member and it was the decision of the Board to follow the procedure set forth in the Constitution and Bylaws.

. . . The Board voted to refer the case of Malcolm E. Bridwell, MD, to his county medical society for whatever action deemed appropriate concerning his membership status.

. . . The Board of Trustees approved a proposal for an OSMA London Trip.

. . . The Board received information on H.R.

1818, a National Health Insurance Bill, and took no action at this time.

(17) The Board of Trustees makes the following recommendations: 1. The Board of Trustees requests approval by the House of Delegates of the actions of the Board herein reported. 2. The Board solicits support of the Annual Program of Activities for implementation until the next annual meeting of the Association.

Report of the
CONSTITUTION AND BYLAWS
COMMITTEE
May 4-6, 1977
(APPROVED AS AMENDED)

INTRODUCTION

The Constitution and Bylaws Committee is charged with the duty of considering amendments proposed by members of the Association or by component societies, and to present those amendments with its recommendations to the House of Delegates. The Committee may originate its own amendments to the Constitution and Bylaws for consideration by the House. This year, at the request of the OSMA Officers and the Council on Planning and Development, the Committee drafted a series of possible Bylaws amendments for House consideration. The amendments, as drafted, are presented below.

POSSIBLE CONSTITUTION AND BYLAWS AMENDMENTS:

A. VICE-PRESIDENT AND SECRETARY-TREASURER ON PLANNING COUNCIL:

The following amendments should be made to assure that the Vice-President and the Secretary-Treasurer of the Association will always serve as members of the Council on Planning and Development.

The third grammatical sentence in Chapter VII, *Section 3.00 VICE-PRESIDENT*, should be amended to read as follows: "He shall be a member of the House of Delegates, Board of Trustees, and the Council on Planning and Development."

In that same chapter, the first sentence in *Section 4.00 SECRETARY-TREASURER*, should be amended to read as follows: "The Secretary-Treasurer shall be a member of the House of Delegates, the Board of Trustees, and the Council on Planning and Development."

The remainders of both Sections 3 and 4 should remain unchanged.

Chapter IX of the Bylaws specifies the Councils of the Association and their membership. Section 1.02 of Chapter IX should be amended to read as follows: "The Council on Planning and Development should be chaired by the immediate Past-President, and shall otherwise consist of the President, President-Elect, Vice-President, Secretary-Treasurer, Speaker of the House of Delegates, Chairman of the Board of Trustees, Chairmen of all other association councils and Delegates and Alternate Delegates to the American Medical Association." The remainder of that section should remain unchanged. This amendment adds the Vice-President and Secretary-Treasurer to the list of persons to serve on the Council.

B. GRIEVANCE COMMITTEE COMPOSITION CHANGE:

Chapter X, *Section 4.00* of the Bylaws specifies that the Grievance Committee shall consist of the "last five living Past-Presidents who are residing in the state of Oklahoma." The phraseology would include the Immediate Past-President of the Association as a member of the committee. This, in itself, could present a problem if any action of the Grievance Committee was ever appealed to the Board of Trustees, as provided in the Bylaws. Since the Immediate Past-President is a general officer, he is automatically a member of the Board of Trustees and his presence on both groups could be a conflict of interest. Therefore, it is recommended that the Grievance Committee composition be changed to exclude the Immediate Past-President.

Another reason for excluding the Immediate Past-President is simply the number of assignments he already has. In addition to being a member of the Grievance Committee, as Immediate Past-President he is a member of the Board of Trustees, a member of the House of Delegates, Chairman of the Council on Planning and Development, a member of the Executive Committee, and a member of the Financial Aid to Education Committee.

It is recommended that the Grievance Committee be reconstituted as follows: The last five living Past-Presidents, excluding the Immediate Past-President, the Chairman of the Council on Members Services, the Chairman of the Council on Medical Services, and two physician-members to be appointed by the

President. It is obvious that the latter four, the two chairmen and the two appointees, would change each year. The five Past-Presidents would assure continuity on the Grievance Committee from year to year, eliminating the necessity of establishing staggered terms.

The Chairman of the Council on Members Services is included because of the possibility that a grievance might be filed due to a member's difficulty with one of the various insurance programs of the Association. The Council on Medical Services Chairman would serve because of his familiarity with the Peer Review mechanism of the Medical Association. (While it might appear logical that the Chairman of the Peer Review Committee be named to this position, there is no direct provision in the Bylaws for this committee. In addition, the Peer Review Committee has filed a number of grievance complaints in the past. The chairman of that committee, would be prejudiced and not serve on the committee that hears the grievance.)

In order to bring about the changes outlined above, the following amendments should be made to the Bylaws:

Section 4.00 of Chapter X is amended by striking the present language and inserting in its place the following: "*Section 4.00 GRIEVANCE COMMITTEE.* The Grievance Committee shall consist of the last five living Past-Presidents, excluding the Immediate Past-President, who are residing in the state of Oklahoma, and the Chairman of the Council on Members Services, the Chairman of the Council on Medical Services, and two members to be appointed by the President each year. The senior member from the standpoint of services shall be Chairman."

C. JOURNAL BUSINESS MANAGER

Chapter VII of the Bylaws, *Section 3.00*, provides that the Executive Director of the Association shall serve as Business Manager of *The Journal*. To carry out the request of the General Officers it would be necessary to amend this section to read as follows: "The Executive Director shall designate the Business Manager of *The Journal* subject to the policies established by the Editorial Board and the Board of Trustees." This amendment removes the requirement that the Executive Director, himself, shall serve as the Business Manager and allows him discretion in designating a Business Manager.

D. COUNCIL ON SCIENTIFIC ASSEMBLY:

The following amendments to the Bylaws would be necessary to create a permanent council that would carry out the planning and execution of the scientific programs of the Association or the participating specialty organizations, or other physician groups.

CHAPTER IX, *Section 1.00*, is amended to read as follows: "The Councils of the Association shall be: Council on Planning and Development, Council on Members Services, Council on Medical Services, Council on Professional and Public Relations, Council on Governmental Activities, Council on Medical Education, Council on Public and Mental Health, and *Council on Scientific Assembly*." (The italicized language is an addition to the current Bylaws.)

The following new sections should be added to Chapter IX to delineate the activities of the new council:

Section 9.00 COUNCIL ON SCIENTIFIC ASSEMBLY:

"9.01 DUTIES. The Council will, upon request, work with other interested medical and allied health organizations to plan and carry out scientific programs for the Association's membership. It shall be responsible for assisting the planning, and publicity of such meetings, and for the planning and conduct of all related events and functions not otherwise assigned to other association councils, committees, or officers.

"9.02 APPOINTMENT.

Notwithstanding *Section 1.02*, above, this council shall consist of three members appointed annually by the President. He shall designate one of the three as Chairman of the Council. In addition, each medical specialty organization recognized by the American Medical Association shall be entitled to one representative on the council for each 100 members, or part thereof, it has in the state of Oklahoma. The Dean of the Oklahoma University College of Medicine shall be entitled to designate one person to serve on the council from each of the University's major branches (Oklahoma City and Tulsa). The Chairman of the Association's Council on Medical Education shall automatically be a member of this council.

E. COMPONENT SOCIETY MEETINGS:

At the present time Chapter XI, *Section 4.00*, of the Bylaws requires that a component society must meet at least six times each year. As a practical matter most of the smaller county so-

cieties are meeting quarterly, at the most. Therefore, it is recommended that this section be amended to read, "A component society must meet at least four times each year. Officers shall be elected at the last meeting scheduled for each year."

F. EDITORIAL BOARD MEETING AND REPORT:

In order to assure an annual meeting of the Editorial Board of *The OSMA Journal* and a report on its activities during the year, the following amendments shall be made.

Section 4.01 DUTIES OF THE EDITORIAL BOARD, Chapter VIII, is amended to read, "The Editorial Board shall determine the editorial policies of *The Journal* under supervision of the Board of Trustees. It shall select articles for publication, consult with the Business Manager on advertisers, financial statements, format and association news coverage, and perform all other acts necessary or expedient in publication of the periodical. It shall meet at least annually to compile a report for the Board of Trustees and House of Delegates to consider at the Annual Meeting. The report shall outline *The Journal's* editorial and news activities for the preceding year. This report shall be in addition to the budget specified in *Section 5.00*, below."

G. BYLAWS REVIEW:

As a general statement, the Constitution and Bylaws of the Oklahoma State Medical Association are very thorough and quite complete. There are a few minor alterations that need to be made in the Bylaws to correct past oversights. These changes are outlined below.

a. Chapter II, *Section 1.031*, should be amended to delete the title "Junior Members" under the sub-section (a). In 1976 the House of Delegates amended the Bylaws to provide that Junior Members may be assessed dues annually. This deletion removes the Junior Member classification from a section of the Bylaws that states they would be completely exempt from payment of dues.

b. Chapter IV, *Sections 1.00 and 1.04*, needs to be amended to reflect the change in the name of the Student American Medical Association. *Section 1.00* should be amended by deleting "Student American Medical Association" and replacing it with "American Medical Student Association." *Section 1.04* should be amended by deleting "SAMA" in both places where it appears and replacing it with "AMSA."

c. Chapter VI, *Section 4.00* should be amended to add the category of "active dues-exempt" members to those eligible to hold office. This provision is made elsewhere in the Bylaws and this would be a "housekeeping" amendment to clean up an oversight. The new *Section 4.00* would read, "ELIGIBILITY. Any active, active dues exempt, or life member in good standing, who has full membership rights and privileges, may be elected as a General Officer, Trustee or Alternate Trustee."

d. Chapter VII, *Section 7.00*, needs to be amended by deleting the phrase "Committee on Planning" in the second grammatical sentence and replacing it with "Council on Planning and Developments." This amendment corrects one of the assignments of the Immediate Past-President to correspond to amendments made by the House of Delegates in 1976 changing the Committee on Planning to a council.

e. Chapter X, *Section 1.00*, should be changed to reflect the new standing committees as designated by the 1976 House of Delegates. This section should be amended to read as follows: "STANDING COMMITTEES. The Standing Committees of the Association shall be: Constitution and Bylaws Committee, Executive Committee, Grievance Committee, Financial Aid to Education Committee, and the Physicians Committee."

f. Chapter X, *Section 3.00*, dealing with the Executive Committee needs to be amended by deleting the phrase, "and the Chairman of the Board of Trustees." and placing a period after "Section 1.00." Inclusion of the Chairman of the Board in this definition is redundant since he is included in the definition of "General Officers" as specified in the Constitution.

RECOMMENDATION:

It is recommended that the Constitution and Bylaws changes recommended in this report be approved with instructions to the Board that the changes be incorporated on the basis of the reports approved in other actions by the House of Delegates.

Respectfully submitted,

Lewis Taylor, MD, Chairman
Members:
Irwin Brown, MD
Harry Singleton, MD

Report of the COUNCIL ON PLANNING AND DEVELOPMENT May 4-6, 1977 (APPROVED)

INTRODUCTION:

The Council on Planning and Development was created by the House of Delegates at its 1976 Annual Meeting as a part of OSMA's reorganizational plan, which was designed to clarify and simplify the Association's organizational structure as well as establish a more orderly process for program development.

In addition to the Council on Planning and Development, there were six new operational councils into which were referred the majority of the Association's program activities. The Council on Planning and Development was established for the general purpose of coordinating the planning process.

The composition of the Council on Planning and Development is stipulated in the bylaws as follows:

"Immediate Past-President (Chairman); President; President-Elect; Speaker of the House of Delegates; Chairman of the Board of Trustees; Chairmen of all other Association Councils; and Delegates and Alternate Delegates to the American Medical Association."

There is an amendment before the House of Delegates this year which would add the Secretary-Treasurer to the council — apparently an oversight in the reorganization last year.

The Council is charged with developing the Annual Program of Activities (APA) that reflects the long range objectives of the Association, but recognizes and permits sufficient flexibility to cope with the day-to-day problems faced by a dynamic organization such as OSMA. This is the first year under this new organizational plan and the Council has held three meetings with the chairmen of the other six operational councils and have considered progress reports and recommendations for next year's APA. Reports of these councils now before the Board reflect the success of the new system and indicate the careful consideration that has been given to each activity on which the Association will embark next year. The Council does not have the responsibility to approve or disapprove programs, that authority is reserved for the Board of Trustees and the House of Delegates. The principal function is to

mold into a comprehensive program those activities selected by each council to be undertaken during the next administrative year, and to ascertain the financial ability of OSMA to fund the various programs.

Specifically, the mission of the Council on Planning and Development as described in the bylaws is as follows:

"The Council will study and make recommendations to the Board of Trustees and to the House of Delegates concerning the long-range objectives of the Association, and will assess and make recommendations regarding the resources and programs necessary to reach these objectives. It will also present at each annual meeting its recommendations to the Board of Trustees regarding an Annual Program of Activities which must be consonant with long-range planning objectives."

In addition to the planning and coordinating function, the Council also has the responsibility to consider and recommend to the House of Delegates resolutions to be presented at AMA meetings. Since the Council has, as a part of its membership the AMA Delegates and Alternate Delegates, it is uniquely qualified for this role. A part of this report will recommend action on resolutions to be presented to the AMA.

In the following sections of this report are presented the recommended objectives for OSMA's operational councils and committees. These recommendations are based upon the reports of the various councils tempered with the ability of the OSMA staff and after considering the financial condition. In the final analysis, the Annual Program of Activities will be written by the House of Delegates. This report is a guide from which the Delegates can begin their deliberations.

ANNUAL PROGRAM OF ACTIVITIES

A. Council on Medical Services

The Council on Medical Services has as part of its responsibility the Association's Peer Review Committee Activities, which have been reorganized within the past year to improve the case review procedure and reduce the number of cases referred. The new system appears to be working well. The Committee publicized through the Oklahoma State Medical Association's *Journal* the new policies and procedures. The Council makes no budgetary request for the Peer Review Committee, but the Board of Trustees and the Delegates should be aware that as increased burdens are placed

upon this particular committee of the Association, additional funding might be required.

The Council has been successful in securing excellent physician representation on the Health Systems Agency Board of Trustees and its Subarea Councils. To improve communications between the "providers" who serve on the Board and others in the state affected by the HSA, the Council has recommended the creation of a Study Committee which will accumulate, coordinate and disseminate information regarding health planning to all OSMA members and others who might be allies of organized medicine. No additional budgetary requirement is needed for this effort.

The Council also calls upon the Board of Trustees and the House of Delegates to support the passage of the EMS improvement act; the re-instatement of AMA's Council on Sports Medicine; the endorsement of the American College of Pathologists Proficiency Testing Program for physicians' office laboratories; support of Governor Boren's reform efforts in the area of workmen's compensation; and the Council's request that OSMA's legal counsel be delegated the responsibility for dealing with the problems involved with collective bargaining — a subject that has lead to the creation of a special AMA Division and a series of seminars for physicians and medical association staffs. The Council on Planning and Development concurs in these recommendations, and since there are no budgetary considerations, it recommends their approval.

The Council recommends the expenditure of \$2,000 for the Oklahoma Council for Health Careers, an organization partly created and continually supported by OSMA since its founding in the early 1960's. This expenditure has been approved in previous OSMA budgets and has been taken into consideration for the planning of this budget and therefore no special consideration is necessary.

NEW BUDGET REQUEST — \$0

B. Council on Members Services

No other Association activity has more impact upon physician members of the Association than those functions carried out by the Council on Members Services. Insurance programs sponsored by OSMA result in millions of dollars in savings to OSMA members, and this particular Council deserves special compliments from the House of Delegates and OSMA members.

The Council on Planning and Development

concur in the recommendations of the Council on Members Services and recommends that the \$2,000 be appropriated for student, intern and residents activities. It should be noted that the Association has annually sponsored medical students and residents to various organized medicine activities and the approval of this \$2,000 expenditure will not add to the overall operating budget of OSMA since it is a recurring appropriation and not new.

NEW BUDGET REQUEST—\$0

C. Council on Governmental Activities

This Council is recommending an aggressive federal legislative program that will include an on site Washington representative. While the OSMA has maintained an extremely effective relationship with the Oklahoma Legislature over the past years, our effectiveness with the United States Congress through the AMA Washington office has diminished in the past few years. It seems that the AMA's philosophy espoused in Washington is often alien to Oklahoma physicians, and in order to express more conservative views, the Council has suggested the employment of a Washington-based representative who would assist OSMA in coordinating meetings with the Oklahoma Congressional Delegation and facilitate the conducting of various health forums across the state. It was the opinion of the majority of the members of the Council on Planning and Development that this recommendation be approved. However, the Board of Trustees and the House of Delegates should carefully consider this recommendation in view of budgetary constraints.

In addition to the Washington-based specialist, the Council requests approval of a "congressional key man" team; approval of funding for periodic trips to Washington, D.C.; and the authority to organize and coordinate "congressional health forums".

The new budget requests are:

Washington Representative	\$12,750
Washington Visits	4,200
Total	<hr/> \$16,950

NEW BUDGET REQUEST — \$16,950*

*An alternative to funding this program out of surplus funds or by increasing dues would be to allocate a portion of the special assessment voted two years ago.

D. Council on Professional and Public Relations

The Council on Professional and Public Relations is one of the most active councils in the Association structure. Its activities over the past year have been well demonstrated in the actions detailed in the Council's report. Many of the Council's recommendations were approved by the Delegates in previous action, however, a number are new and will require new or increased funding.

The list of recommendations is as follows:

Membership Brochure	\$ 4,500
Physicians Committee Folder	\$ 2,000
Media Recognition Award	\$ 500
News Media Relations	\$ 750
Revised Medical Update Series	\$ 5,000
"Ask A Doctor"	\$ 2,000
Public Service Announcements	\$13,000
Journal Articles	\$ 2,000
Video Cassette Recorder/ Playback Unit	\$ 1,700
Total	<hr/> \$31,450

Obviously full funding of all of the projects out of the OSMA's operating budget is impossible. However, it is difficult for the Council to reject any of the proposals made by the Council on Professional and Public Relations.

The Membership Brochure was approved by the Board of Trustees shortly after the annual meeting last year and it is a necessary tool to Association operations. The original appropriation was \$2,500, which has been found to be short of the amount necessary to produce a quality brochure. An increase of \$2,000 is necessary and the Council on Planning and Development endorses this project.

The Physicians Committee Folder can be delayed in view of the President's Report and the likelihood of substantial changes being made in the Association's grievance and disciplinary procedures. It might be in the Council on Professional and Public Relations' best interest to forestall this project until a more definitive role for the Physicians Care Committee is established. In the interim, by use of the Redactron Typewriter, the Council could write letters of information about the Physicians Care Committee to County Medical Society Officers, Trustees, Delegates and others in the Association who might benefit by having knowledge of the committee.

The Council has no reservations regarding the Media Recognition Award nor the appropriation requested for media relations. More-

over, the Medical Update Series is an on-going project of the Association and to keep it revitalized and to maintain interest, it will be necessary to produce and distribute additional pamphlets.

The "Ask A Doctor" Program has proven to have public relations benefit to the profession and the Council recommends that one such program be conducted in 1977-78.

Regarding the request for the funds to produce public service announcements, it would be the recommendation of the Council on Planning and Development that the three PSA's already in production be tested and the value of the responses determined before the additional announcements are produced. In the event the Council and the Board of Trustees feel it important to do an additional three spots, a supplemental appropriation could be made by the Trustees.

There have been any number of occasions during the past few years when it would have been beneficial for the Association to have a video tape recording of certain TV programs and documentaries that cast discredit upon the medical profession. An Association owned video cassette recorder and playback unit would provide the Association with the opportunity to make such recordings, and the expenditure for such a unit is not substantial. The \$1,700 recommended would not seem inappropriate.

The Council also recommends that an appropriation of \$2,000 be made for the purpose of hiring authors to write articles for *The Oklahoma State Medical Association Journal*. The *Journal* Editorial Board and the Officers of the Association have indicated a strong interest in improving the readership of *The Journal* and the Council on Planning and Development concurs that such articles may improve readership.

The totals of the projects recommended by the Council on Planning and Development would be \$21,700. The cost of the Medical Update, the video-cassette recorder and playback unit, and the public service announcements could be financed from the special assessment, leaving a balance of \$8,500 to be included in the budget as a new budget request.

NEW BUDGET REQUEST — \$8,500

E. Council on Public and Mental Health

During the course of the year it was necessary for a change in the chairmanship of this council,

thus there were not a great number of projects attempted. The Council did attempt to work with the State Health Department in implementing the ill-fated swine flu influenza campaign, but for well publicized reasons there was little public response to the program.

The Council has been reorganized and recommends that \$750 be appropriated for a Thyroid Cancer Screening Program which could be funded through the Association's administrative budget and would not require added monies. In addition, the Council recommends the establishment of an environmental quality committee and efforts to secure the passage of a model health education bill through the Oklahoma Legislature, neither of which would require additional funds.

F. Council on Medical Education

The House of Delegates approved last year the formation and implementation of a plan requiring a certain number of continuing medical education credits as a condition of membership in the OSMA. The Council on Medical Education now recommends to the Delegates a specific plan of accreditation and implementation with financial requirements of \$5,000.

In 1956, the Association established a loan and scholarship fund for the purpose of assisting medical students experiencing financial hardships. The fund has been used for that purpose and also, with authority from the House of Delegates, for scholarships to medical students who agree to practice in rural or needy areas of the state. The program has been successful and a total of nine students have been recipients of the scholarship funds. However, in the last session of the United States Congress, a health manpower bill was passed which provides substantial funding for medical students who will agree to public service, including tenures in rural and needy areas. The State Legislature has likewise appropriated substantial funds for similar purposes. The net result has been that there are few demands upon the Association's scholarship funds, which did not provide amounts equal to that offered by the federal and state programs. Hence it would appear that if the Delegates so desire, the monies originally set aside for the education of medical students could be transferred for the purpose of providing continuing medical education for Association members. Such an action would not jeopardize existing scholarships or programs. Each dues paying member contributed \$5 to the fund,

which is more than sufficient to carry out the activities of the Council on Continuing Medical Education. The Council on Planning and Development recommends that the \$5,000 request of the Council on Medical Education be approved and that serious consideration be given to the reallocation of the Rural Loan and Scholarship monies to continuing medical education.

RESOLUTIONS

Resolutions #2, 3 and 4 call upon the AMA to take certain actions: regarding the reinstatement of the AMA's Committee on Sports Medicine; against the Department of Health, Education and Welfare; regarding the publication of physicians' names who collect certain sums of money from the Government Health Insurance Programs; and to implement a nationwide public relations campaign.

These resolutions are the result of actions taken during the meetings of the Council on Planning and Development and all are recommended to the House of Delegates for affirmative action.

SUMMARY AND CONCLUSIONS

By necessity, the report of this Council is a series of recommendations, resulting from a full perspective of the Association's activities and the demands upon its resources. None of the programs recommended by the various councils are without merit and all deserve careful consideration by the Delegates. The Annual Program of Activities recommended by this Council is within the management and fiscal ability of the Association for 1977-78. However, the Delegates could expand those abilities with a dues increase if they felt the program recommendations were important enough to do so.

The 1977-78 budget projections indicate a conservative surplus of approximately \$10,000.

To fund the recommended programs of the Council, after deleting those projects that could be funded by the special assessment and by transferring the commitment of the loan and scholarship fund, would require an additional \$25,450 or a net transfer from the Association's existing surplus of \$15,450 (assuming that the surplus for 1976-77 is \$10,000).

It is the recommendation of the Council on Planning and Development and the Association's Budget and Audit Committee that this method of funding be approved.

BUDGET RECAPITULATION

<i>Council</i>	<i>Total Budget Request</i>	<i>Special Funds</i>	<i>Net Budget Appropriation for '77-'78</i>
Medical Services	\$ 0	\$ 0	\$ 0
Members Services	\$ 0	\$ 0	\$ 0
Governmental Activities	\$16,950	\$ 0	\$16,950
Professional and Public Relations	\$21,700	\$13,200	\$ 8,500
Public and Mental Health	\$ 0	\$ 0	\$ 0
Medical Education	\$ 5,000	\$ 5,000	\$ 0
TOTALS	\$43,650	\$18,200	\$25,450

Respectfully submitted,

Arnold G. Nelson, MD
Chairman

Resolution No. 1 (APPROVED)

TITLE: Memorializing Robert M. Bird, MD
SUBMITTED BY: Tulsa County Medical Society

REFERRED TO: Reference Committee III

WHEREAS, Robert M. Bird, MD served as a distinguished faculty member of the University of Oklahoma College of Medicine for 22 years; and

WHEREAS, Doctor Bird served as Dean of the College for four years; and

WHEREAS, he greatly influenced the students and house staffs of the University of Oklahoma Health Sciences Center in obtaining scientific knowledge, its clinical application, and compassion for the patient; and

WHEREAS, after retiring from the Deanship, he continued his productive career as Director of the Lister Hill National Center for Biomedical Communications; now therefore, be it

RESOLVED, That in recognition of his significant contributions to medical education and health care in Oklahoma and elsewhere, the Board of Regents of the University of Oklahoma be respectfully urged to name the medical library of the University of Oklahoma Health Sciences Center the *Robert M. Bird Memorial Medical Library*.

Resolution No. 2
(APPROVED)

TITLE: Reinstating of AMA's Sports Medicine Committee

SUBMITTED BY: OSMA Council on Medical Services

REFERRED TO: Reference Committee I

WHEREAS, The American Medical Association has had a viable Sports Medicine Committee until its abolishment on January 1, 1977; and

WHEREAS, Sports plays such an important role in the lives of so many Americans; and

WHEREAS, There are now more cases than ever before appearing in the courts concerning injuries in sports, and even though they are dealing with the manufacturers of equipment, it is yet to be seen how the litigation of these cases will affect the physicians who treat these patients; therefore be it

RESOLVED, That the American Medical Association's House of Delegates strongly urge the AMA Board of Trustees to reinstate the Sports Medicine Committee on a national level.

Resolution No. 3
(APPROVED)

TITLE: AMA Public Relations Program

SUBMITTED BY: Council on Professional and Public Relations

REFERRED TO: Reference Committee II

WHEREAS, the medical profession has both a commitment and an obligation to the American public; and

WHEREAS, this obligation includes not only the direct health care needs of the public but also its knowledge and awareness of the various health care issues; and

WHEREAS, never have so many health issues and governmental programs promised to have such a pronounced and deleterious effect on the health and the health care of the public; and

WHEREAS, never has there existed as great a need for a nationally coordinated program to educate the public regarding both the scientific and the socioeconomic aspects of their health care and the private practice of medicine; and

WHEREAS, medicine's commitment to the public demands that it fulfill this obligation by providing timely information regarding the

various scientific and socioeconomic aspects of their health care; and

WHEREAS, the dissemination of health information must be nationally coordinated; and

WHEREAS, only the American Medical Association has both the resources and the commitment to conduct such an information program; therefore, be it

RESOLVED that the House of Delegates of the American Medical Association hereby instructs the officers and staff of the AMA to initiate a vigorous public information program designed to inform the American people regarding all aspects of the health care profession; and be it further

RESOLVED that this campaign shall include the production of a series of public service announcements which shall be made available to the various state and metropolitan county medical societies; and be it further

RESOLVED that this campaign shall include the production of documentary film(s) regarding the private practice of medicine, the availability of health care and the accomplishments of the American health care profession; and be it further

RESOLVED that this program shall include closer liaison and cooperation with the various state and metropolitan county medical societies; and be it further

RESOLVED that this program shall be continued as long as it is in the best interests of the American public.

FISCAL NOTE: The cost of conducting this program will vary significantly depending upon how many public service announcements and how many documentary films are produced. The cost of producing a 30-second PSA is approximately \$2,000, depending upon the technique which is used. The cost of producing a documentary film averages between \$1,000 and \$1,500 a minute. Promotion costs should be nominal. Since AMA has its own film department, these costs might be slightly less.

Resolution No. 4
(APPROVED)

TITLE: Abolishing Medicare-Medicaid Reimbursement Lists

SUBMITTED BY: Council on Planning and Development

REFERRED TO: Reference Committee I

WHEREAS both the Department of Health, Education and Welfare and the Social Security

Administration have performed a grave disservice to the American public by releasing information fraught with errors, oversights and false accusations; and

WHEREAS hundreds of physicians have been libeled and have had their professional reputations questioned and tarnished by the release of incorrect and erroneous Medicare-Medicaid reimbursement lists; and

WHEREAS a survey conducted by the American Medical Association has shown the latest Medicare list to have an error rate of approximately 65 per cent; and

WHEREAS as a result of these errors physicians and their families have been subjected to unwarranted abuse and harassment; and

WHEREAS the release of incorrect and erroneous information of this type is an unconscionable act; and

WHEREAS neither HEW nor SSA has shown a willingness to apologize to the public and to the medical profession, both of which have been wronged; and

WHEREAS physicians who receive Medicare-Medicaid reimbursements are cooperating in a program designed by government and administered by government at government's request; and

WHEREAS the release of such lists, even if required by law and/or regulation, serves no useful purpose; therefore, be it

RESOLVED that the House of Delegates of the American Medical Association hereby admonishes both the Department of Health, Education and Welfare and the Social Security Administration for releasing incorrect lists of Medicare-Medicaid reimbursements; and be it further

RESOLVED that the House of Delegates of the American Medical Association hereby officially demands a formal apology from both HEW and the Social Security Administration for releasing grossly inaccurate information; and be it further

RESOLVED that the House of Delegates of the American Medical Association hereby instructs the officers and staff of the AMA to investigate all possible avenues and to take all possible legal recourse in order to prevent the further release of such information.

FISCAL NOTE: Undetermined

Resolution No. 5
(APPROVED)

TITLE: Adverse Effects of Laetrile

SUBMITTED BY: Council on Governmental Activities

REFERRED TO: Reference Committee I

WHEREAS, Amygdalin (Laetrile) has been found to be an ineffective medication in studies done by both governmental agencies and private research; and

WHEREAS, the Oklahoma State Medical Association has traditionally tried to protect the public from unscrupulous medical treatment; and

WHEREAS, the Oklahoma State Medical Association feels an obligation to inform the Oklahoma citizens of the danger in delay of adequate medical diagnosis and treatment; and

WHEREAS, the medical profession is firmly against any attempts to profiteer on medications, potions or therapy at the expense of potential terminally ill people; therefore, be it

RESOLVED, that the OSMA explore every possible way to make the public aware of the ineffectiveness of Amygdalin (Laetrile); and be it further

RESOLVED, that the OSMA continue every possible effort to inform and protect the residents of the State of Oklahoma as to the dangerous precedence that legalization of Laetrile will have on a medically vulnerable group of patients; and be it further

RESOLVED, that copies of this resolution be distributed to all members of the Oklahoma State Legislature and Governor David Boren.

Late Resolution No. 6
(APPROVED)

TITLE: Task Force to Study Regionalized Perinatal Care Programs

SUBMITTED BY: Council on Public and Mental Health

REFERRED TO: Reference Committee II

WHEREAS, Twenty-eight states in the nation have operating regionalized perinatal care programs; and

WHEREAS, such programs have demonstrated effectiveness in reducing perinatal mortality rates; and

WHEREAS, The American Academy of Pediatrics, The American College of Obstetrics and Gynecology and The American Academy of

Family Physicians have jointly urged the establishment of regionalized perinatal care programs; and

WHEREAS, the state of Oklahoma does not have a regional perinatal care program; therefore, be it

RESOLVED, that the House of Delegates authorize the President of the Association to appoint a task force from representatives of the above mentioned organizations to study the feasibility of establishing a regionalized perinatal care program with instructions that a report be filed with the House of Delegates at its annual meeting in 1978.

*Late Resolution No. 7
(APPROVED)*

TITLE: Opposition to Legislation Prohibiting or Restricting Electro-convulsive therapy or psychotropic drugs

SUBMITTED BY: Oklahoma District Branch
American Psychiatric Association

REFERRED TO: Reference Committee I

WHEREAS, there are increasingly numerous legislative attempts across the country to restrict medical practice in the name of human rights, and

WHEREAS, such restrictions often interfere seriously with patients' access to proven, effective, and necessary treatment; and

WHEREAS such restrictions and delays have caused serious increases in morbidity and even deaths in their efforts to protect a few patients from possible abuses; and

WHEREAS, there has been demonstrated no effective substitute for the efforts and judgment of competent and responsible physicians for the provision of quality medical care; now therefore be it

RESOLVED, that the Oklahoma State Medical Association state that the administration of electro-convulsive therapy and psychotropic drugs are recognized modalities of medical treatment and should be subject to the same regulations and precautions for patient safety and welfare as any other medical and surgical procedure; and be it further

RESOLVED, that the OSMA will strongly oppose any proposed state legislation which would restrict the practice of medicine beyond the recognized and traditional tests for safety

and efficacy now required and practiced under current Oklahoma laws pertaining to medical practice, by medical ethics, and by review of physicians' peers.

*Late Resolution No. 8
(APPROVED AS AMENDED)*

TITLE: Human Chorionic Gonadotropin (HCG)
SUBMITTED BY: Council on Public and Mental Health

REFERRED TO: Reference Committee II

WHEREAS, the Oklahoma State Medical Association has been advised that the drug Human Chorionic Gonadotropin (HCG) is presently being utilized by commercial weight control programs within the State of Oklahoma, and,

WHEREAS, the Oklahoma State Medical Association has been further advised that the drug HCG is being utilized by such commercial ventures under the guise of its administration being medically supervised, but without benefit of a doctor-patient relationship, and,

WHEREAS, the United States Food and Drug Administration has found that HCG has not been demonstrated to be an effective adjunctive therapy in the treatment of obesity, and,

WHEREAS, the United States Food and Drug Administration has further found that there is no substantial evidence that the use of HCG increases weight loss beyond that resulting from caloric restriction, or that it causes a more attractive or normal distribution of fat, or that it decreases the hunger and discomfort associated with caloric restricted diets, and,

WHEREAS, the Department of Drugs of the American Medical Association has found no scientific evidence from controlled experiments to justify the use of HCG in the treatment of obesity, and,

WHEREAS, the American Medical Association has stated that because of the unproven usefulness of HCG, it would appear that there is an ethical question raised whenever a physician engages in a weight loss scheme, using HCG, and,

WHEREAS, the California Medical Association's Advisory Panel on Internal Medicine has found no specific documentation of HCG's efficiency in weight control, and,

WHEREAS, physician participation in a

weight control clinic may constitute unprofessional conduct whenever the use of HCG is advertised as a miracle reducing method or the clinic aggressively solicits patients and classifies them as clients or customers, now therefore, be it

RESOLVED, that the House of Delegates of the Oklahoma State Medical Association encourage its members to refrain from participating in any weight control program that utilizes HCG as the principal weight reducing agent, and be it further

RESOLVED, that this resolution be published to the profession.

*Late Resolution No. 9
(APPROVED)*

TITLE: Oklahoma Industrial Recreation and Fitness Council

SUBMITTED BY: George B. Gathers, Jr., MD, Stillwater, Oklahoma

REFERRED TO: Reference Committee II

WHEREAS, leaders in business, industry, government and education have recognized the value of good health and physical fitness in executives and employees alike, and

WHEREAS, in response to a need for a coordinated statewide employer/employee fitness and recreation program, representatives from business, industry, education and government met on December 15, 1976 to organize the Oklahoma Industrial Recreation and Fitness Council (OIRFC), and

WHEREAS, said council was incorporated on February 23, 1977 as a non-profit association of leading business, industry and educational organizations dedicated to the improvement of the health of Oklahoma employees through recreational fitness, and

WHEREAS, the industrial fitness field is so new that nothing has previously been done on the scope of the Oklahoma Council, and the Council is therefore making national history with a unique program which may well become a national model for other states to follow, and

WHEREAS, Governor David L. Boren has voiced his approval by stating; "Your plan to organize business and industry, government and education, in an effort to provide industrial recreation and physical fitness is commendable. The value of industry joining forces to economically make available recreational activities for

workers is an innovative idea and one I fully support. It's obvious that a healthy person can be more productive and efficient." and

WHEREAS, the Oklahoma State Medical Association believes in improving quality of life, therefore be it

RESOLVED, That the Oklahoma State Medical Association officially go on record as approving the concept of the Oklahoma Industrial Recreation and Fitness Council, and thereby encourage business and industry to establish better provisions for recreational fitness for both executives and employees, aided by council and advice from education and government, and be it further

RESOLVED, That the Oklahoma State Medical Association commends Mr. Ralph Lafferty, President of Zebco Division Brunswick Corporation in Tulsa, the first President of the Council; Abe L. Hesser, Executive Director of the Oklahoma Department of Tourism and Recreation; C. J. Roberts, Coordinator of the Office of Research and Extension within the Oklahoma State University School of Health, Physical Education and Leisure Services, Executive Vice-President of the Council, and J. O. Grant-ham, Director of University Extension at OSU, Chairman of the Council Documents/Programs Committee for their efforts in organizing and incorporating said Council and accepting responsibility for its leadership.

*Late Resolution No. 10
(APPROVED)*

TITLE: Appreciation to Rex E. Kenyon, MD

SUBMITTED BY: OSMA Board of Trustees

REFERRED TO: Reference Committee III

WHEREAS, Rex E. Kenyon, MD has tirelessly served his County, State and American Medical Association spanning many years; and

WHEREAS, Doctor Kenyon was elected Chairman of the American Medical Political Action Committee in January, 1977; now be it therefore

RESOLVED, That the Board of Trustees of the Oklahoma State Medical Association convey its deep appreciation of Doctor Kenyon's service, an appreciation to be formalized by the presentation of a plaque in the future; and be it further

RESOLVED, That the OSMA membership support Doctor Kenyon in his AMPAC Chairmanship. □

Worth Repeating

As a matter of policy, *The Journal* does not reprint previously published articles and editorials. However there are many times when strict adherence to such a policy deprives us of an opportunity to pass on to our readers some profound wisdom or valuable information. The following article seems to contain both. It was written by Dr Armond Start and appeared in the *Oklahoma Communicable Disease Bulletin*, Vol. 77, Number 25. It is reprinted as our guest editorial with the permission of its author who is Director of the Division of Communicable Disease Control, Oklahoma State Department of Health. MRJ

HOW MUCH IS A PET SKUNK WORTH?

Two rather distressing events occurred recently which have prompted us to reflect on the value of attempting to domesticate wild animals, especially skunks. In one day, our laboratory reported positive rabies tests on two "pet" skunks. The devastating results of well meaning, but poorly informed, individuals who attempt to make a pet of an animal that should be left in its natural habitat will become obvious as we recount the physical, emotional and financial burden that resulted.

Skunk #1 was captured by two men in northwestern Oklahoma in broad daylight. It was around two months old at the time. The men took the small animal to their shop where two co-workers played with it, letting it crawl over their arms and head.

The foreman of the shop decided to take the animal home to his wife and four-month old son. Since the animal was small, the wife obtained an eyedropper and began force feeding it. Sometimes she had to put her hands in its mouth to relieve choking, etc. A few times, after she had put her hands in the skunk's mouth, she let her young son suck on her fingers. In addition, she allowed the skunk to crawl on her son, a very cute sight indeed.

The six children from the family next door also fell in love with the new pet, and had very close association with it. They, too, enjoyed having the baby skunk crawl all over them. One girl, in fact, was bitten on the hand by the animal.

All were deeply saddened when the pet died. Just to be safe the animal was checked. It was found to have rabies.

Skunk #2 was over 2 years old. This northeastern Oklahoma skunk had been thoroughly domesticated to the point that it had been descented and immunized against rabies. It had been given a good modified live virus vaccine, licensed only for dogs and cats, approximately two years before its untimely death.

After the skunk had bitten one man, and exposed two children, it was euthanized and submitted for rabies examination. The results of the test were positive. It is impossible to determine if the illness in the skunk was due to "street" or vaccine rabies virus, although a two-year central nervous system infection with vaccine virus seems very unlikely.

Tally: 2 "pet" skunks proved positive for rabies

15 humans treated
360 injections
\$7,500.00 estimated cost

These two incidents point out several very serious considerations.

1. Any skunk in Oklahoma is a potential source of rabies exposure, regardless of age or geographical location.

2. Rabid pet skunks often expose many individuals because of peoples' curiosity toward such a unique pet.

3. The economic burden can be devastating to a family with multiple exposures when one considers that the average cost to treat an adult is \$500.00.

4. Vaccinating skunks against rabies has not been shown to provide protection for the animal. *There is no rabies vaccine licensed for use in skunks. Skunks should not be vaccinated.*

5. A false sense of security develops in the "owner" when we encourage domestication by providing vaccination, de-scenting, and other pet care for skunks.

I recently returned from the American Medical Association's annual meeting in San Francisco . . . a meeting that impressed me in many ways and convinced me in others. I was impressed by the efficient manner in which the AMA conducts its meetings, and I was even more impressed by the sincerity and enthusiasm of the AMA's delegates. Of the 249 seats in the AMA House of Delegates, 248 were filled. These hard-working men and women committed many hours to medical society business, and they deserve the recognition and appreciation of their peers. We here in Oklahoma sometimes do not agree with the actions taken by our national association, but I don't think we can doubt their sincerity.



The most convincing event which I experienced in San Francisco was the major policy address by Joseph A. Califano, Secretary, Health, Education and Welfare. Although an extremely well-educated man, Califano does not appear to fully understand the problems that face the health care profession. His answers to the problems of cost and distribution are vague and are restated solutions that have not worked in the past. I was impressed, however, with Mr. Califano's sincerity and his obvious commitment to major reform of our profession. We can expect major moves toward more federal controls during the next few years. The text of Secretary Califano's address is included in the news section of *The Journal*.

Another event that occurred at the AMA meeting reaffirmed my belief in the democratic process of our organization and the importance of expressing one's opinion. It proved that a small state can change the course of a national organization if it perseveres. For many months M. Joe Crosthwait, MD, the Chairman of OSMA's Council on Professional and Public Relations, has attempted to secure from the AMA their public education program supporting our existing health care system. It was Dr Crosthwait's opinion and that of his Council that, though not perfect, America's health care

system is the best in the world, and the public should be reminded of that fact. During the AMA's clinical convention last December, Dr Crosthwait and I sat down with the public relations director of the AMA to discuss this subject, and it was apparent that the AMA had no plans to develop a comprehensive health education program. Shortly afterward Dr Crosthwait initiated a series of letters between staff and officers of the AMA attempting to impress upon them the importance of such a public relations effort. Since that time there have been a series of meetings, staff to staff, and Dr Crosthwait and I have held personal meetings with AMA trustees and officers.

Receiving no satisfaction, OSMA, with the approval of the Board of Trustees and House of Delegates, introduced into the AMA House of Delegates an Oklahoma resolution instructing the AMA to conduct a "vigorous public information campaign." The resolution was not adopted, but its introduction, the subsequent debate before the reference committee, and the debate on the floor of the House of Delegates resulted in a commitment from the AMA Board of Trustees that such a program would be undertaken and that state medical societies would receive full details of the program within the next 60-90 days. In fact, the AMA trustees' commitment is more affirmative than that called for by the Oklahoma resolution. Undoubtedly the full series of events, the initial OSMA-AMA contact, the subsequent staff discussions and dialogue between AMA-OSMA officers, the resolution, the open debate in the reference committee and before the delegates caused this change in AMA policy. I now firmly believe that AMA will be more responsive and more responsible in this particular area to its member-physicians.

I was quite impressed by what happened in San Francisco, and I was happy to learn that a small state society such as ours can affect AMA policy. The AMA public education program and that of the OSMA will be extremely important as the Washington bureaucracy continues its push for national health insurance.

C. S. Lewis, Jr., M.D.

Mucocutaneous Lymph Node Syndrome

DAVID RUIZ, MD
MARVIN S. KROBER, MD

Mucocutaneous lymph node syndrome, a disease first recognized in Japan, has been seen in a patient in Oklahoma City.

INTRODUCTION

The child with a rash and fever is one of the more common problems of differential diagnosis in pediatrics. Now a new diagnostic possibility must be considered — the mucocutaneous lymph node syndrome (MLNS). Reported first in Japan in 1967,¹ the disease has subsequently been seen in various parts of the United States.^{2, 3, 4} We now present the first case to be recognized and reported from the state of Oklahoma.

CASE PRESENTATION

A 6-year-old girl was hospitalized in July 1976 with the main complaint of prolonged

fever, generalized maculopapular rash, edema of hands and feet, and lymphadenopathy.

The patient's illness began 13 days prior to her hospitalization when she developed an erythematous, maculopapular rash over the abdomen, chest, and back. This rash became generalized the next day and fever was noted. After five days of persistent rash and fever, the patient was taken to a physician. Oral tetracycline and antipyretics were prescribed. The patient's condition did not improve. Periorbital edema, edema of the hands and feet, and cervical lymphadenopathy appeared over the next few days. Ampicillin was added to the therapy.

Antibiotic therapy had been discontinued three days prior to her hospitalization. The patient was referred to Oklahoma Children's Memorial Hospital for further investigation on the thirteenth day of her disease. Physical examination on admission revealed an alert girl who did not appear acutely ill. Her temperature was 38.8°C. She had a diffuse erythematous, maculopapular rash fading toward the extremities. Non-pitting edema of hands and feet was noted, and periorbital edema was also present. Her lips were dry with crusty, brownish fissuring at the corners of the mouth. No mucosal lesions were present except for moderate erythema of the pharynx. The tongue had a strawberry appearance. There was a mild conjunctivitis. There was bilateral cervical lymph node enlargement. Axillary and ingui-

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nal lymph nodes were also moderately enlarged. The lungs were clear. No heart murmur or abnormal cardiac rhythm was detected. The liver was palpated three cm below the right costal margin, and the tip of the spleen could be easily palpated. The remainder of the physical findings were normal.

Laboratory studies showed the following values: Hemoglobin 10.5 gm/deciliter; white blood count: 19,600/cu mm, with 38% polymorphonuclear leukocytes, 10% bands, 7% eosinophils, 36% lymphocytes, and 8% monocytes; serum glutamic oxaloacetic transaminase, 94 international units/liter; serum sodium, 123 mEq/liter; serum osmolality, 258 milliosmoles/liter; urine specific gravity, 1.030. Studies that yielded normal or negative results included: erythrocyte sedimentation rate, platelet count, BUN, glucose, bilirubin, prothrombin and partial thromboplastin times, serum IgE, urinalysis, chest roentgenogram, EKG, bacterial cultures from blood, urine, and throat, anti-streptolysin O, anti-streptococcal deoxyribonuclease (DNase), and anti-streptococcal hyaluronidase titers, heterophile antibody titer (two determinations), cold agglutinins, and acute and convalescent titers for measles, adenovirus, herpes, rubella, EBV, histoplasma, coccidiomycosis, blastomycosis, Rocky Mountain spotted fever, and toxoplasmosis.

The patient became afebrile on the fifth day of hospitalization. The initial hyponatremia

David Ruiz, MD, was graduated from the University of Madrid, Spain "Facultad de Medicina" in 1965. He limits his practice to his specialty, pediatrics. Doctor Ruiz is a Fellow in Infectious Diseases, Pediatrics, at the University of Oklahoma Health Sciences Center. He is a member of the Catalan Society of Pediatrics, Spain.

Since his graduation from Western Reserve University School of Medicine, Marvin S. Krober, MD, has been certified by the American Board of Pediatrics. Doctor Krober is Assistant Professor in pediatric infectious disease at Children's Memorial Hospital at the University of Oklahoma Health Sciences Center. He is affiliated with the American Society of Microbiology, the Southern Society for Pediatric Research and the Southern Medical Association.

was corrected promptly after fluid restriction. No medication was given. The edema of the face and extremities resolved gradually over the following few days and the fissuring of lips, strawberry tongue, and conjunctivitis subsided. The rash subsided within the first five days and was followed by a generalized desquamation of the skin with gross peeling over the fingertips and toes. The patient was discharged after six days with normal physical findings except for skin desquamation. The patient has been followed for eight months and no abnormalities have been detected.

DISCUSSION

This case shows most of the expected features of the mucocutaneous lymph node syndrome (MLNS). Perhaps the most striking feature was the prolonged duration of fever, unaffected by administration of antibiotics and poorly controlled with antipyretics. Fever often persists three weeks or more. An erythematous rash is almost always present. It generally appears one-to-five days after the onset of the fever and is diffuse but without any fixed pattern. Conjunctivitis also occurs with engorgement of the bulbar conjunctiva but no exudate.

The mouth shows an erythematous dry oral mucosa. The tongue is also erythematous and bears prominent papillae in a pattern identical to the strawberry tongue of scarlet fever. The lips may show fissuring. There is a diffuse lymphadenopathy.

The hands and feet show non-pitting edema and there is a bright erythema of the palms and soles. During the convalescent period, there is a characteristic desquamation over the tips of the fingers and toes.

Other clinical features which may be seen in occasional cases of the syndrome include diarrhea, abnormalities of liver function, arthralgia and arthritis, and meningismus.

There is no specific laboratory finding which can be used to confirm the diagnosis of MLNS. Patients often have increased white blood cell counts with a predominance of polymorphonuclear cells, an increased erythrocyte sedimentation rate, pyuria and proteinuria, slight pleocytosis in the cerebrospinal fluid, and an elevated serum IgE.

The cause of the disorder is unknown. No exposure to toxins has been demonstrated. No infectious agent has been isolated. One group has reported finding rickettsial-like organisms

in tissue biopsies, but this has not been substantiated. Further studies related to the elevated IgE levels in these patients might lead to establishing the cause of the disorder.⁵

It must be stressed that about two percent of children with MLNS die. Death generally occurs in the third or fourth week of illness and is due to disease of the coronary arteries.⁶ Pathologic specimens have demonstrated presence of coronary thrombosis. Coronary angiograms in surviving patients sometimes demonstrate aneurysms of the coronary arteries. Fatal cases clinically resemble infantile polyarteritis nodosa.

Several other disorders must be excluded before a diagnosis of MLNS is established. In particular, the rash, fever, and strawberry tongue may suggest a diagnosis of scarlet fever. However, in MLNS cultures for streptococci will be negative and significant titers for ASO or other streptococcal enzymes will not be found. Furthermore, the edema of the hands and feet and the subsequent desquamation around the tips of the digits is not seen in scarlet fever. Failure to respond to penicillin, of course, also suggests MLNS.

Stevens-Johnson syndrome may be suspected in some patients with MLNS. Differences include a lack of conjunctival exudate, less marked oral lesions with no ulcers, absence of vesicular lesions and the typical non-pitting edema of hands and feet.

Juvenile rheumatoid arthritis must also be excluded. The rash of MLNS is much more striking than that generally seen in juvenile rheumatoid arthritis. Again, the changes in the hands and feet are not seen with rheumatoid arthritis.

Atypical measles might be considered a possible diagnosis in some patients. Lack of history of immunization with killed measles virus would make this diagnosis unlikely. Pneumonia would be more likely to occur in patients with atypical measles. Fever would tend to be more prolonged in cases of MLNS.

Rickettsial diseases such as Rocky Mountain spotted fever could potentially be confused with MLNS. History of tick bite, marked myalgia, severe headache, and more diffuse pitting edema would be more characteristic of Rocky Mountain spotted fever. Platelet counts tend to be elevated in MLNS and depressed in Rocky Mountain spotted fever. Finally, serologic tests are available to confirm the diagnosis of rickettsial disease.

Perhaps the greatest temptation for incorrect diagnosis is to label cases of MLNS as a viral syndrome. All cultures and serologic tests for viruses have so far been negative in patients with MLNS. The clinical features that have been discussed allow the separation of this group of patients with MLNS from the general group of children presenting with fever and non-specific rash. It is important to do so because of the potential for death due to cardiac complications in MLNS.

SUMMARY

A child with the mucocutaneous lymph node syndrome is presented. This represents the first report of this disease in Oklahoma. Clinical features of this disorder and differential diagnosis from more familiar diseases are discussed. The potential for death due to myocardial infarction in this disease is stressed.

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Risk Factors of Endometrial Cancer and Estrogens

PAMELA AVERY, MD

A review of the literature suggests a correlation between endogenous and exogenous estrogens and the incidence of endometrial cancer.

A possible causal or contributory association between estrogen hormones and endometrial cancer, as well as breast cancer, has been the subject of medical speculation for several years. The literature has focused on estrogen-induced cancer in laboratory animals and examples of human breast, vaginal and endometrial cancer which seemed related to endogenous or exogenously administered estrogen. Clinical impressions concerning endometrial cancer have never been convincingly validated with epidemiological studies until recently when two new studies were published which attempted to more firmly establish the association of oral estrogen use and carcinoma of the endometrium by means of a retrospective study of matched samples of patients.^{14, 17} Not only is exogenous estrogen administration being closely examined but the endogenous

levels of estrogen and how these levels may relate to cancer production are also being investigated. The various types of estrogen found in high-risk subjects as well as the altered hormonal status of menopause are being carefully studied for possible links to cancer production and their possible role in the development of endometrial cancer specifically.

It has been known for many years that several factors are associated with an increased risk for developing endometrial carcinoma. MacMahon⁶ has described a classification of these risk factors. The first group of risk factors includes variation of normal anatomy and physiology. Obesity, nulliparity and late age of menopause are all factors which significantly increase a woman's risk of developing endometrial cancer. Of these factors, it has been established that obesity has a unique association with endogenous estrogen levels.¹² While the predominant estrogen hormone of the normal premenopausal female is estradiol of ovarian origin, the obese female has an increased production of estrogen in the form of estrone.¹² This estrone comes from the conversion of androstenedione to estrone in the peripheral fat tissues and may, in part, explain the elevated levels found in the obese premenopausal female as compared to the non-obese premenopausal female.¹² Of considerable interest is the fact that the predominant estrogen of the postmenopausal female is also in

the form of estrone and its production also occurs via this extraglandular aromatization of androstenedione to estrone. The androstenedione is produced mainly in the adrenal gland and slightly less in the ovaries while the aromatization occurs in the peripheral fat tissue. Furthermore, this increased estrone production seen in postmenopausal women is associated with the aging process independent of body weight. In fact, obese premenopausal women have lower estrone levels than obese post-menopausal women demonstrating the cumulative effects of obesity and the aging process.¹² Siiteri and McDonald demonstrated that post-menopausal females with endometrial cancer as well as premenopausal females with endometrial cancer have increased levels of estrone production. They found rates of conversion of androstenedione to estrone two to three times as high in women with endometrial cancer or hyperplasia as in women without such cancer.^{4, 8, 10} Schindler and his associates confirmed this with a conversion rate four times as high in patients with cancer as compared to those without cancer.¹² However, these patients were not always matched with control patients of the same weight, making obesity once again an important variable. This, of course, along with the above evidence has led to a great deal of speculation concerning the role of estrone in the production of endometrial cancer and what role, if any, estradiol plays. Some researchers have even suggested that estradiol may play some protective role by interacting with special uterine receptors and preventing estrone-uterine receptor interaction but much of this remains speculative and unproven at present.¹³ The nulliparous woman is equally at risk of developing endometrial cancer. This may be connected with the predominant estrogen influence in nulliparous women who have had no periods of high progesterone levels as seen in pregnancy.

The second group of risk factors described are those involving frank disease states. These are diseases such as diabetes mellitus, hypertension, Stein-Levanthal syndrome and cancer of the breast and ovary, all of which have a high incidence of occurrence in association with endometrial cancer.⁸ This category of disease states includes several instances in which there is an increased incidence of endometrial neoplasm associated with conditions in which there is increased and continuous estrogen production. Chronic anovulation as seen in

polycystic ovarian disease is an example of such a condition. Young women with this abnormality are at increased risk of developing endometrial cancer.⁸ Increased estrone production may also occur when there is an increased availability of androstenedione. This is seen in the induction of ovarian stromal hyperplasia by non-endocrine tumors of the ovary or in secretory tumors of the ovary with direct secretion of increased amounts of androstenedione.⁸ Women with any of the above disease states have been shown to have an increased risk of developing endometrial cancer. As we can see, the exclusive production of estrone may be involved in some yet undefined mechanism resulting in the increased likelihood of the development of endometrial neoplasia. Even though the constitutional stigmata that give rise to extraglandular estrone production are precisely those that favor an increased occurrence of endometrial neoplasm, it may well be that there is some other mechanism still undefined which is responsible.

The last group of risk factors cited by MacMahon to be discussed are those associated with pelvic irradiation and the suspected association with prolonged estrogen administration. While pelvic irradiation has long been suspected of producing endometrial cancer, exogenous estrogen administration has only recently come under heavy criticism. Between 1962 and 1973 dollar sales of estrogen quadrupled in the United States.¹⁷ A large majority of the hormone is supplied in the form of conjugated estrogens, principally sodium estrone sulfate.¹⁷ Recent articles by Ziel and Finkle and Smith and his associates suggest that the estrone form of exogenous estrogen may be associated with the development of endometrial cancer.^{14, 17}

It has long been suspected that unopposed estrogen administration leads to cystic hyperplasia then adenomatous hyperplasia of the endometrial glands and eventually carcinoma in situ leading to frank invasive carcinoma.^{2, 7} Meissner, Sommers and Sherman produced

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this picture in laboratory animals by the continuous administration of stilbesterol injections.⁹ Other researchers have seen and reported these pathological changes in human surgical specimens of uteri with carcinomatous involvement. The hypothesis that such a condition exists is not unreasonable and has led to the current opposition of prolonged, unopposed estrogen therapy, favoring instead cyclic administration hoping to simulate the natural hormonal milieu without inducing the above chain of pathological events.

With the possibility in mind that exogenous estrogen might in some way be associated with the development of endometrial cancer, Ziel and Finkle devised a means of studying patients with endometrial cancer compared to two matched controls without known endometrial cancer and then compared the incidence of conjugated estrogen use in the two groups. They found a significantly increased incidence of estrogen use in those women with endometrial cancer as opposed to the matched control (57% as compared to only 15%).¹⁷ Smith and his associates compared patients with endometrial cancer to controls with other gynecological cancers and found that 152 of 317 patients with adenocarcinoma of the endometrium used estrogen while only 54 of the 317 controls were users.¹⁴ Both groups assessed the magnitude of the relative risk associated with estrogen therapy when adjusted for concomitant variables such as obesity, hypertension, diabetes, parity, referral pattern, age at diagnosis, year of diagnosis and other gynecological problems and found that the relative risk associated with exogenous estrogen was highest in those women without obesity or hypertension.^{14, 17} But it is to be remembered that the obese or hypertensive woman is still at a high risk of developing endometrial cancer just by the fact of being obese or hypertensive.¹⁶ The data of these two articles suggest the risk of endometrial cancer is increased five to 14 times in women taking estrogen. The nature and magnitude of this risk may be put into perspective by a comparison with the threefold to ninefold increased risk for endometrial cancer in association with obesity alone and a 17-fold increased risk of death from lung cancer in those who smoke 20 cigarettes a day.¹¹

The above two studies, while being the first to attempt to scientifically validate the sus-

pected association between exogenous estrogen and endometrial cancer, probably raise more questions than they can answer. Some researchers have voiced the following concerns. "Of the many preparations on the market do some predispose relatively more to endometrial carcinoma than others? Is long duration of use particularly more hazardous? But might prolonged use be also necessary to lower the incidence of other cancer and arteriosclerotic vascular disease? Are women who use lower doses of estrogen more susceptible to other cancer? If a post-menopausal woman periodically sheds her endometrium while using estrogen, will her cancer risk still be elevated? Are there some women in whom estrogen use does not increase endometrial cancer risk and if so, how can we identify that woman? And finally are there nonhormonal agents which might be used to effectively reduce the symptoms of menopause?"¹⁵

Our evidence to date rather strongly suggests a connection between the use of conjugated estrogens and the development of endometrial cancer. However, in view of the absence of data both from similar epidemiological studies in other populations and from follow-up studies our conclusions can only be tentative. While all of the above data present compelling arguments against prescribing estrogen preparations to menopausal and post-menopausal women, as with any drug, the possible adverse effects must be balanced against the benefits that these hormones can provide. Estrogens are excellent in providing relief from menopausal symptoms such as vasomotor instability and atrophic changes of the vaginal vault as well as retarding the development of osteoporosis, at least in the first few years after menopause. Against this background of possible adverse effects, probable and possible beneficial effects, claims and counterclaims, how does the physician decide where and when to prescribe these estrogens for the patient?¹⁵ There seems to be no question that if estrogens are prescribed to a woman with an intact uterus, especially a postmenopausal woman, she should be monitored closely for the development of endometrial cancer. The data at present simply are not adequate to provide a proper answer to the question of whether estrogens should be prescribed at all. It is hoped that new and more conclusive studies will soon be available, and will allow us to make more accurate and informed decisions.

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Professional Medical Liability: Arbitration and Screening Panels

S. S. SANBAR, MD, PhD

Oklahoma is one out of a dozen states remaining that has no legislation dealing with arbitration or screening panels in medical liability cases.

I. Introduction

The purpose of this paper is two-fold. First, it presents an overview of arbitration and pretrial screening panels as possible alternatives to litigation in cases involving professional medical liability or, as frequently referred to, medical malpractice. Second, it attempts to review some of the current arbitration statutes in the United States, with particular reference to statutory provisions for binding arbitration of medical malpractice claims.

This paper *does not* deal with caselaw. Most of the arbitration statutes are new and have yet to be tested, debated, construed and challenged in courts. Even newer are the more informal methods of resolving medical malpractice and other health disputes, such as the

pretrial screening panels. It will take years before the impact of the new statutory provisions for arbitration and pretrial screening panels is fully realized.

II. An Overview of Arbitration and Screening Panels

Professional medical liability, or medical malpractice, has been a nationwide issue for several years, and in the bicentennial year, 1976, was undoubtedly one of the most important dilemmas about which doctors, lawyers, legislators and other governmental officials and the public at large are deeply concerned.

The outlook for medical malpractice looks grim indeed, with medical liability insurance premiums escalating at an exponential rate, resultant to a great degree from the multiplying number of suits and the larger amounts of settlements and awards of individual claims, and except for Colorado, Georgia, Nebraska and Oklahoma, the states are confronting two major problems with respect to medical liability.¹ One problem is the availability and the second is the exorbitant premium rates for medical liability insurance. For instance, highest risk category rates below \$10,000 in many states are considered by many physicians as "cheap."

a. Ways Out of the Malpractice Mess

Doctors have attempted numerous ways out of the malpractice mess.² Some have "gone bare," placing their assets in trusts. Some have joined the military where the hours of work are regular and there are no worries about liability premiums. Some doctors have moved from states where premiums are high to other states with lower premiums. Some doctors would rather fight the plaintiff and countersue. Some simply give up and go into early retirement.

The better approach, however, to alleviate the immediate and future malpractice mess is to lay a firm foundation of alternatives and solutions aimed at resolution of the continuing, agonizing saga — the doctor's dilemma of malpractice. Such a foundation of necessity requires that doctors acquaint themselves with the duties owed to their patients, the ramifications of pertinent laws governing the practice of medicine and total commitment on the part of all parties involved to search diligently for all the causes, or etiologic factors, of malpractice, then proceed to map an all-inclusive therapeutic regimen. To accomplish this task, at least five things need to be performed — namely, proper *education* of both doctors and the public about the problem; candid *communication* with open and honest discourse particularly between patients and doctors; sincere effort to avert *litigation*; lucid, equitable and remedial *legislation* both at the state and the federal levels; and utilization of alternatives to litigation such as *arbitration* and *pretrial screening panels*.³⁻⁵

b. Definition and Categories of Arbitration

Arbitration may be simply defined as a method by which parties to a dispute submit their differences to the judgment of an impartial party. This may be done either by mutual consent or by statutory provision. There are four general categories of arbitration:

(1) *Compulsory* — Each malpractice dispute would be compelled to submit to arbitration.

(2) *Voluntary* — Each malpractice dispute could be submitted to arbitration, but in contrast with compulsory arbitration, under this category the right to jury trial is not lost; this applies to both the plaintiff and the defendant.

(3) *Binding* — The arbitration award is final and binding, both with respect to liability and damage determination.

(4) *Non-binding* — The arbitration award is *not* final, and either the plaintiff or defendant may elect to litigate to claim *de novo*, a situation that is costly both in time and money.

One can, therefore, avoid litigation by submission to arbitration. This is accomplished either by a clause in the initial contract to the effect that future disputes will be arbitrated, or by a subsequent agreement to submit an existing dispute to arbitration.

c. Development of Arbitration

The common law was originally hostile to arbitration, and Sayre⁶ pointed out that, "Lord Coke's dictum in *Vynior's* case, 8 Coke Rep. 816 (1609), that an agreement to arbitrate is revocable, has been seen to be the origin of much of this hostility." Jackson⁷ briefly reviewed the historical developments of arbitration and indicated that from 1698 until 1889, the English Parliament adopted legislation permitting statutory relief for arbitration in England. In 1920, New York passed the first effective state arbitration statute, and in 1925, Congress followed with the U.S. Arbitration Act. He also cited the English case of *Scott v Avery*, 5 H.C.L. 811 (1855) which held that when submission to arbitration is a condition precedent to litigation, that would suffice to bar a suit. On the other hand, Jackson noted that agreements to submit future disputes to arbitration were held void as illegal conditions to a party's bringing a suit, citing the case of *M. Bernstein, Private Dispute Settlement*, 38 (1968).

Arbitration allegedly has several advantages over litigation including rapid disposition of cases, selection of arbitrators who are knowledgeable in the medical field, and others who are legally "sophisticated," relaxation of certain exclusionary rules thereby accepting hearsay statements and quotation from medical treatises, diminution of the likelihood of exorbitant and unreasonable awards, minimization of publicity, and decrement of the overall case load in the congested courts.⁸ Meaney *et al*⁹ conclude a discussion of alternative methods to litigation by stating that in the future patients may be compensated on a basis of no fault, but in the interim, compulsory and binding arbitration clauses should perhaps be included in medical insurance contracts. Coulson¹⁰ believes that arbitration is simple and flexible; it is resorted to when traditional

methods of resolving controversy fail. The St. Paul Fire and Marine Insurance Company has strongly endorsed arbitration plans as alternative to litigation for its medical liability policyholders.¹¹

In February 1971, President Richard Nixon directed the Secretary of Health, Education and Welfare (HEW) to convene a commission on Medical Malpractice "to undertake an intensive program of research and analysis in this area." After two years of pursuit of the President's mandate, the Department of HEW published an 870-page Appendix of the reports, studies and analysis of the Secretary's Commission.¹² It is noteworthy that 280 pages of that Appendix deal with alternatives to litigation — namely, arbitration, pretrial screening panels and no-fault-based medical injury compensation systems. An exhaustive amount of information including references to case reports, judicial rulings and law reviews are compiled in that HEW publication.

d. Screening Panels

There are five major types of pretrial screening panels:¹²

(1) *Physician screening panels*: These are controlled by physicians, are secretly operated and their major purpose is to determine whether a claim alleging malpractice should be defended or settled.

(2) *Physician-and-Advisory Screening*

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Panels: These are composed primarily of physicians, with added representation by a lawyer, a clergyman or a member of another profession in an advisory capacity.

(3) *Medical-Legal Screening Panels*: These are the most popular plans and they may be regional or statewide. The panels are composed of members of the medical and legal professions, thereby providing more equitable representation of the professions and broader understanding and objectivity in resolution of disputes.

(4) *Court-sponsored Screening Panels*: These are administered under the court system, e.g. in New York and New Jersey jurisdictions.

(5) *Statutory Plan*: Here the legislature institutes the screening panel.

Relative to arbitration, there has been little written about Screening Panels.¹²⁻¹⁵ For one thing, they are newer concepts as compared to arbitration, and secondly there is some hesitation to utilization of screening panels because the panelists' decisions are *not* binding, a situation that is similar to non-binding arbitration.

Confusion can arise when the term "panel" is used in a discussion of arbitration. Dornette¹⁶ lumps arbitration proceedings and pretrial screening panels as foremost among the methods used in attempting to reduce the cost of determining fault in medical malpractice disputes. Davidson¹⁷ expounds on *arbitration* and states that the American Arbitration Association would set up a three-man *panel* consisting of a lawyer, a physician and a person representing consumer interests. Despite the fact that the terms *arbitration* and *panel* are used loosely, nevertheless they represent separate entities.¹²

III. Statutory Provisions for Arbitration and Pretrial Screening Panels in Medical Malpractice Claims

The legislators' response to the medical malpractice problem has been overwhelming, an indication of the much needed remedial legislation in this area. Zimmerly¹⁸ and Bergen¹⁹ have reviewed some of the new proposals for legislative remedies in this area, including the bills in Congress (HR 1305; HR 1378; S 188; S 215; S 482; HR 3954; and HR 387) and in the States of Indiana, Maryland, Michigan, North Carolina, Wisconsin, New York and New Jersey. Bergen¹⁹ has remarked that final and

binding arbitration as an alternative to court litigation is a popular proposal these days, but that pretrial screening panels are controversial with no clear indication as to whether they are beneficial. The best and probably most equitable laws of arbitration in medical malpractice are exemplified by those of Michigan (Public Acts 140 and 141 of 1975, cited later) which allow disputes to be presented to a three-person panel, consisting of a lawyer, a doctor or hospital administrator, and a public person for final and binding resolution.^{20, 21} Indiana has also had a similar law.²²

Appendix "A" cites 37 modern arbitration statutes which apply to existing and future disputes; common-law-based arbitration statutes apply only to existing disputes.²³ Eight states have enacted legislation in 1975 and 1976 which provide for binding arbitration of medical malpractice claims. These states are Alabama, California, Louisiana, Michigan, Ohio, South Dakota, Vermont and Virginia (Appendix "B").²³ Other state statutes have been amended to thereby explicitly apply arbitration in malpractice as in Maryland, Minnesota, Ohio, Pennsylvania and Wisconsin (Appendix "B").²³ Other states may well enact similar legislation.

The providers of health care covered under the arbitration laws include chiropractors, clinics, dentists, physicians, health dispensaries, health facilities, health maintenance organizations, hospitals, nurses, nursing homes, optometrists, osteopaths, pharmacists, physical therapists, podiatrists, psychologists, and sanatoria.

On November 20, 1975, Sammons, Executive Vice-President of the American Medical Association (AMA) forwarded a memorandum to the Executive Directors of all state medical associations pertaining to the subject of arbitration survey.²⁴ Sammons stated that "Arbitration is one of many tools that deserves further consideration for proposed professional liability solutions." He also stated that the AMA is cooperating with other agencies including the AAA (American Arbitration Association), ABA (American Bar Association), AOA (American Osteopathic Association), hospitals, and other medical and insurance groups and the Department of HEW, in an effort to monitor the experience of arbitration systems where they are in operation. The advantages of contract arbitration as viewed by the Councils of the AHA (American Hospital Association)

and of the AMA are the same as noted previously. However, the disadvantages include absent validity by most state laws of binding arbitration, difficulty of adhesion, problems with minors and deaths, and an adverse attitude by judges and attorneys toward contract arbitration.²⁵

The report of the AMA does not include important legislation, such as that of New York, California, Florida, Ohio, Wisconsin and others. It is pertinent to expound on arbitration in New York and California, then review the states that have screening panels for medical liability claims.

a. Arbitration in New York

A compulsory malpractice mediation program was started in Manhattan in September of 1971.²⁶ In 1975, this program was extended by law to the entire state of New York.²⁶ This program was conceived by the New York County (Manhattan) Joint Interprofessional Committee of Doctors and Lawyers, and a panel system was developed with the cooperation of the Appellate Division of the Supreme Court. Every malpractice case in New York must be mediated, the object being to relieve the overburdened courts and shorten the waiting period for malpractice trials, which can be as long as five years. However, the New York Panels review only cases that are already in litigation.²⁶ New York's program represents voluntary contractual binding arbitration. It is aimed at shortening the period of time to settle disputes, decreasing awards, eliminating the *Ad Damnum* principle, permitting life case structuring of awards, allowing penalties to deter frivolous suits, and in many cases settlement may be had by a hospital malpractice grievance mechanism and not go to arbitration.²⁷

b. Arbitration Plans in California

Waterhouse,²⁸ a defense attorney in Pasadena, California, reviewed the Ross-Loos program, which was instituted about 1929, a year after the enactment by the California Legislature of an arbitration code which provided for arbitration of certain disputes where parties covenant to arbitrate. Waterhouse noted that *compulsory* arbitration was upheld by the California Supreme Court in a case from the Ross-Loos Clinic in 1935. He indicated

further that the employer has the right to contract for the employee without the latter's signature and the employee is bound to compulsory arbitration. Furthermore, he noted that the case of "*Doyle v. Galucci* in 1962 established even more importantly the right to arbitrate, in that it specifically held not only that the employee can be bound by such a contract, but also his infant son." The same applies to spouses as to children.

In 1969, a project was initiated by the California Medical Association and the California Hospital Association aimed at demonstrating in ten hospitals the use of arbitration in a situation where one did not have a closed panel group, as in the Ross-Loos Group, but rather the more common pattern of a broad-based medical staff with different multispecialties and different types of patients.^{29, 30} In this plan, arbitration is *voluntary*.

c. Screening Panels for Medical Liability Claims

As of the end of 1975, eleven states had passed laws dealing with screening panels for medical liability claims.^{31, 32, 33}

IV. Concluding remarks about the Malpractice Dilemma and The Achilles Tendon of Arbitration

Arbitration is a "method not a panacea" which can be resorted to in an attempt to resolve the medical malpractice crisis, says Lerner,³⁴ associate general counsel of the AAA. He also warns that if arbitration is applied hastily without testing, it could be counterproductive, and monitoring the results of four private contractual arbitration programs in the states which are currently under way — namely, Los Angeles, San Diego, Seattle and Hawaii, should be instructive.

Schnepple,³⁵ an assistant hospital administrator, reviewed the advantages and disadvantages of arbitration in medical malpractice and concluded that, "The forefront of the current malpractice dilemma continues to be the Courts," and because the doctrine of charitable immunity, which traditionally protected hospitals has been overturned, and because of the expansion of the doctrine of corporate negligence, in addition to the doctrines of

respondeat superior and *res ipsa loquitur*, hospitals are experiencing a broader range of accountability. Schnepple feels that while arbitration might include some benefits such as cost savings, plus increased speed, equity, rationality, simplicity and certainty, it still retains both the concept of fault and the adversary relationship inherent in litigation.

McMahon³⁶ is more critical. He believes that arbitration is a technique that carries problems of its own and does not in and of itself address the long-term elements of medical malpractice. He finds weakness specifically in the Kennedy-Inouye bill which proposes a form of mandatory arbitration as a condition precedent to litigation, which doubles the work.

Karp,³⁷ a claims manager for Medical Insurance Exchange of California, points out the following possible effect of arbitration on insurance claims, some of which are overly pessimistic and a few are representative of tubular vision on Karp's part:

- (1) Arbitration may increase the number of claims made against hospitals and physicians;
 - (2) Arbitration of medical malpractice cases may result in greater plaintiff decision;
 - (3) The lack of universality of arbitration may expose an insurance carrier to the "double-jeopardy" for an arbitration hearing for one defendant and a trial for another defendant in the same suit;
 - (4) The finality of the arbitrator's decision denies a defendant the right of appeal;
 - (5) Arbitration encourages more claims because of the ease with which it can be demanded;
 - (6) The loss of jury sympathy may result in greater plaintiff verdicts;
 - (7) No savings in defense costs are anticipated;
 - (8) No protection against multiple hearings of the same issue can be afforded;
 - (9) Chances are that cases will more likely be heard by plaintiff attorneys because the defense attorneys are fewer in number than the plaintiff's. Presumably Karp feels that plaintiff attorneys are not on the side of the insurance companies;
 - (10) Arbitration contracts can be permanent;
 - (11) And a physician who is forced to arbitrate to collect unpaid fees must post \$150.00 in advance for each hearing for administrative fees.
- Perr³⁸ talks about the JAILer conspiracy and puts the blame for medical malpractice on the

attorneys, who after all form the judiciary, are the legal participants, and constitute a substantial part of the legislative bodies of this country, thereby exercising authority and power in an area where the American tradition of checks and balances is accordingly minimized. He points out that the insurance industry is the glue that holds the system together. Ultimately, the insurance system benefits from higher costs. Furthermore, when the physicians alone can no longer shoulder the financial burden of the system, "the 'conspiracy's' tentacles spread out over other aspects of health care." He defends the small minority of highly skilled and respected medical professionals, and indicates that the "tort system has become the great American lottery, offering the chance to get rich by fate rather than deed; in any gambling operation, however, it is the management that collects." Perr feels that the tort system is both a failure and a social menace. He opposes both litigation and arbitration, and he proposes a universal disability plan under the aegis of Social Security.

In a recent editorial in the *Wisconsin Medical Journal*,³⁹ it was pointed out that arbitration is simply a means of substituting one forum for another, that it will not eliminate claims or substantial awards, that it affords savings in the "no liability" cases, that it would require up to five years to evaluate the savings, and that initially the adoption of an arbitration plan may increase the number of lawsuits and appeals therefrom to resolve the above-mentioned issues.

It can be seen, therefore, that while there is substantial optimism toward arbitration, there is also a resounding pessimism. The AAA, ABA, AHA, AMA and others are cautiously albeit clearly moving in the direction of arbitration. Similarly, the legislators are convinced of the need of arbitration and screening panels as a means to solve the malpractice dilemma.

It is concluded that arbitration and screening panels are no more ideas, rather their time has come and they are with us. Time will tell the tale about two new "tillers" of malpractice soil — arbitration and screening panels. However, the operators of these "tills" must play a crucial steering role if the ideas seeded for resolution of the malpractice mess are ever to germinate and produce the anticipated fruits of labor.

This author believes that arbitration and pretrial screening panels as alternatives to

litigation in professional medical liability should be considered among other possible solutions. More and more, states are recognizing the need for some form of arbitration and pretrial screening panels. However, it must be emphasized that not all malpractice cases lend themselves to any one type of solution. This applies equally to both litigation and alternatives to the latter. It is therefore incumbent upon the members of our community, particularly the legal and medical to search continuously for different methods to solve the malpractice dilemma, and to fashion proper and equitable solutions tailored to fit the intricate and individualized problems of our present society.

APPENDIX "A"

(Report, AAA RES. INST., June 15, 1976)

MODERN ARBITRATION STATUTES IN THE UNITED STATES as of January 1, 1976

- United States Arbitration Act. 9 U.S.C.A. §1 et seq.
- Alaska Stats. Ann. 09.43.010 et seq. (1968) *(4).
- Ariz. Rev. Stats. §12-1501 et seq. (1962) *(4).
- Ark. Stats. Ann. §34-511 et seq. *(2, 4, 7).
- Cal. Code of Civil Procedure §1280 et seq. (1961).
- Colo. Rev. Stats. §13-22-201 (1975)*
- Conn. Gen. Stats. Ann. §52-408 et seq. (1958).
- Del. Code Ann., Title 10, §5701 et seq. (1973) *(4).
- Fla. Stats. Ann. §682.01 et seq. (1969).
- Hawaii Rev. Stats. §658-1 et seq. (1955).
- Idaho Code, Chap. 9, §7-901 et seq. (1975) *(4).
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*Referred to as Uniform Arbitration Act but check statute exclusions as to: (1) Construction, (2) Insurance, (3) Leases, (4) Labor Contracts, (5) Loans, (6), Sales, (7), Torts, (8) Applies only to Construction and Collective Bargaining Agreements.

APPENDIX "B"

(Report, AAA RES. INST., June 15, 1976)

STATUTORY REFERENCES

Arbitration Statutes

Alabama	Act 513, § 8, 1975
California	Code of Civ. Pro. § 1295, 1975
Louisiana	Rev. Stats. § 9:4230-4236, 1975
Michigan	Comp. Laws Ann. § 600.5033, 600.5040-5065, 1975
Ohio	Rev. Code Ann. §§ 2711.02, 2711.22-24, 1975
South Dakota	Comp. Laws 21-25A, 58-41-58, 1976
Vermont	12 V.S.A. Ch. 215, 12 V.S.A. Sec. 512 (4), 1976
Virginia	Code of Vol. 2 §§ 8-911, 8-922, 1976

Other Statutes Mentioned

Maryland	Courts and Judicial Proceedings Secs. 3-2A05, 3-2A06, 1976
Minnesota	Stats. Ann. § 62D.11, 1974
Ohio	Rev. Code Ann. § 2711.21, 1975
Pennsylvania	Act of Oct. 15, 1975, PL 390 Sec. 509, Act #111, 1975
Wisconsin	Stats. Ann § 298.04 (1), (2), 1976, § 655.07, 1975

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Oklahoma State Department of Health Chronic Disease Division (Multiphasic Screening Program)

The Multiphasic Screening Program has become an integral part of each of Oklahoma's sixty county health departments. Depending on the county-wide population and the size of its health department staff, screening clinics are available to the general population one to three times a month. The Multiphasic Program was developed several years ago in Oklahoma and annually screens over 100,000 individuals.

1. Detection of Unknown Conditions — This program was developed to detect unknown asymptomatic conditions and to direct those persons showing evidence suspicious of these conditions to a physician for definite diagnosis and treatment, if necessary. Such treatment through early detection may be effective in preventing long term disability or death.

2. Health Education — By participating in screening, individuals learn the importance of routine periodic evaluations for chronic disease; particularly those who screen positive, along with their family and friends, learn about



News From The Oklahoma State Department of Health

asymptomatic chronic disease in a personal and direct way.

The only prerequisite for being screened at one of Oklahoma's county health departments is that the screenee must list the name of his/her physician to be used in case of referral. Additionally it must be understood that no one will be screened for a known or existing condition.

The follow-up of the positive screenee is done by the local health department with the assistance of a nurse from the State Health Department. Records indicate that approximately 60% to 70% of all positive screenees see their physician upon receiving a letter recommending they do so. The public health nurse will encourage the remaining positive screenees to visit their physicians for further evaluations. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JUNE 1977

DISEASE	June 1977	June 1976	May 1977	Total To Date 1977	Total To Date 1976
Amebiasis	—	1	3	10	5
Brucellosis	—	1	1	1	3
Chickenpox	58	90	112	905	1514
Encephalitis, Infectious	2	—	1	9	10
Gonorrhea (Use Form ODH-228)	1093	1033	1043	6219	6199
Hepatitis, A, B, Unspecified	64	75	48	409	819
Leptospirosis	—	—	—	—	1
Malaria	—	—	—	—	—
Meningococcal Infections	4	—	1	10	18
Meningitis, Aseptic	6	—	1	18	9
Mumps	34	28	59	448	629
Rabies in Animals	13	19	21	164	85
Rheumatic Fever	1	2	—	2	8
Rocky Mountain Spotted Fever	22	18	15	49	41
Rubella	1	1	3	27	48
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	2	15	4	52	282
Salmonellosis	40	32	36	100	99
Shigellosis	—	5	3	18	138
Syphilis, Infectious (Use Form ODH-228)	8	10	7	42	58
Tetanus	—	—	—	—	—
Tuberculosis, New Active	43	32	22	182	183
Tularemia	3	1	—	4	6
Typhoid Fever	1	—	—	1	—
Whooping Cough	1	4	—	3	9

HEW Secretary Speaks Out On Health Care



HEW Secretary, Joseph A. Califano, Jr., speaks to the American Medical Association House of Delegates on Sunday, June 19th, 1977.

Editor's Note:

The following is a complete text of Health, Education and Welfare Secretary Joseph A. Califano, Jr.'s June 19th speech before the American Medical Association meeting in San Francisco. Secretary Califano outlines many of the plans government has for medicine in this speech which was billed as a major policy address. Like it or not (and many physicians did not appreciate the secretary's comments) it was a significant address in that Secretary Califano revealed how the Administration truly feels about the medical profession while outlining some of its plans. Since forewarned is forearmed, The Journal offers the following special report.

I think it's a good thing for you and me to meet face to face; to exchange views fully and freely in a spirit of mutual respect and candor.

As professionals, we must remember that doctors and lawyers are never as good as our patients and clients say we are when their illness is cured or their case is won — and never

as bad as they say we are when they get the bill.

In the short time that I've been in office, I have enjoyed the most cordial relationships with the officers and executives of the American Medical Association. They have kept me informed of your views — especially when they diverged from mine!

And I have tried to be open and candid with them — including acknowledgement of mistakes when we think we've made them.

This meeting is part of the essential, continuing communication that must exist between organizations like the AMA and a Secretary of Health, Education, and Welfare. So I'm grateful to you for your hospitality. And I know that the overriding objective we all share is better health for all Americans.

It is against the background of this shared objective that I accepted your invitation to address the opening session of the American Medical Association's National Convention.

I thought it important for you to understand first hand how the new Administration views the health care industry and how we view the doctors who shape so much of that industry.

Americans would like to cling to some hal-
lowed images of medical care in our nation: images that reach back to the placid past of our grandparents.

One cherished image is that of the stern but wise family doctor of Victorian years, jouncing in his buggy from house to house, dispensing pithy wisdom along with the castor oil.

A second image is of more recent vintage: it is the flickering image of the television doctor: first, young Dr Kildare, then Dr Ben Casey, and finally, the reassuring, confidently omniscient Marcus Welby, MD. Unlike you, Dr Welby has only one patient at any given time. And there's another difference: all of his patients get well within the hour.

But the reality of modern medical practice today, as you well know, is much more complicated than Norman Rockwell covers for *The Saturday Evening Post* or television films.

It is our perception of that reality I would like to discuss today: the problems of medical practice and public policy that it poses for you and for me; and some urgent action that all of us — the administration and the Congress, physicians and citizens — must take as we begin to deal with those problems.

For we have set ourselves an ambitious goal in America: a high standard of health care for everyone — at manageable cost.

The extraordinary talent of so many doctors has encouraged us to set our sights high. The genius of a few has provided discoveries that have given millions of our citizens superb quality care. The dedication of many has saved lives and eased pain and misery for generations of Americans.

We know that quality care is available for many Americans. We want to make that quality care available for all Americans. We seek to do it at reasonable cost. The achievement of these two goals at the same time — quality care for all, at reasonable cost — is what we are about.

The quality care objective has long characterized American medicine and physicians, but reasonable cost has not been the strong suit of either American medicine or most of its physicians. We see that not as the fault of affluent doctors — but as the most serious shortcoming of the health care system.

If we are to meet these dual ambitious goals, or even approach them, we must first see the nation's health care system clearly for what it is.

To do that, we must pull the camera back; back from the past; back from fiction, with its narrow, close-up view of Dr Welby. When we do that there comes into view a vast, sprawling, complex, highly expensive and virtually non-competitive industry — one of the nation's largest though least understood industries, a unique system of economic relationships that are commanding, and controlling, an ever larger share of our nation's resources.

We perceive health care in America today as big business.

To be sure, health is not just another industry; the enduring strength and high quality of the doctor-patient relationship is a vital element in the medicine of the 1970's, just as it was a generation ago — and generations before that.

But the term industry is still an apt one — and it provides a critical perspective on the

health care system for public policy makers.

With expenditures of \$139 billion in 1976, the health care industry is the third largest in the United States. Only the construction industry and agriculture are larger.

- In 1975, 4.8 million people worked in the health industry. That was 5.1 percent of the national workforce — slightly more than one American worker in 20.
- In the same year, 375,000 physicians were in practice in America: one for every 570 citizens.
- Health care spending was 5.9 percent of the Gross National Product in 1965. It was 8.3 percent in 1975. And, at present inflation rates, it could reach 10 percent of GNP by 1980. In that year, spending on health care will, without some kind of restraint, have ballooned to \$230 billion, \$1,000 for each man, woman and child in America.

The giants of corporate America have moved in to obtain their share of the health industry — major companies like IBM and Bausch & Lomb. Many of the major pharmaceutical companies are in the Fortune 500. The profits of these drug companies are far above the average for large corporations in America.

We perceive health care as an inordinately complex and fragmented industry. It contains over 7,000 hospitals with a total capacity of 1.5 million beds; 16,000 skilled nursing homes, with a capacity of 1.2 million beds; thousands of laboratories and hundreds of suppliers of drugs, expensive medical equipment and other medical products.

Decisions in this industry are made — by a host of private and public institutions — without adequate planning at the state and local level.

We perceive health care as a very costly industry. The median income of the average American family was \$13,700 in 1975. In that same year, the average family expenditure for health care was nearly \$1,600, more than 10% of the median income.

An average hospital stay cost less than \$350 in 1965. It now costs over \$1,300. Private health insurance premiums have jumped 20-30 percent in just the last year alone.

And the American people paid doctors a total of \$26.3 billion in 1976.

We perceive the health care industry as virtually noncompetitive. The features of the

competitive marketplace that have served our people so well in other industries — to promote efficient allocation and utilization of resources — are just about non-existent in the health care industry.

- The patient — the consumer — may select his family doctor — but he does not select his specialist, his hospital, the services he is told he needs, the often expensive medical tests to which he is subjected. The physician is the central decision-maker for more than 70 percent of health care services.
- Increasingly, the patient — the consumer — does not pay directly for the service he (or she) receives. Ninety percent of the hospital bills are paid by third parties — private insurance companies, Medicare, Medicaid.
- These reimbursement mechanisms usually operate on a cost-plus or fixed-fee-for-service basis, the most expensive and least efficient ways to function.
- Most public and private benefit packages are heavily biased toward expensive in-patient care.
- The unavailability of price and quality information keep the consumer of health care services dependent on the decisions of the health care provider, who plays a dominant role in determining demand for health services and whose financial well-being is determined by the price charged.
- The ability to restrict access to competitors — hospital credential committees that can deny or delay privileges to Health Maintenance Organizations, for example — provide special levers of market control.

These are some of the dominant economic features of the health care industry — features which provide many powerful incentives to spend more, and few, if any, incentives to spend more efficiently.

We must face a basic fact: there is virtually no competition among doctors or among hospitals. And, just as important, there is precious little competition among pharmaceutical companies or among laboratories. For pharmaceutical and medical device and equipment research has become big business, with patent monopoly pots of gold at the end of the research rainbow.

These economic features pose severe prob-

lems in allocating and utilizing health care resources in the most effective way possible — problems that, although grounded in the economics of health care, relate ultimately to the broad national goal of providing, with limited resources, quality health care to all Americans at reasonable cost.

We do not perceive the health care industry as a world of good people and bad people. Doctors are not bad and para-professionals good. Hospitals do not wear black hats while government policy makers wear white ones. That is not the point.

The point is that doctors, hospitals, pharmaceutical companies, nursing home operators — all the inhabitants of this non-competitive, free spending, third party-payor world — act exactly as the incentives motivate them to act: conscious of quality, insensitive to cost.

The result, inevitably, is a set of economically classic structural problems.

First: Our health resources, abundant as they are, are not well-distributed, either economically or equitably.

In the past ten years, we have made considerable strides toward opening access to health care for many people. But major problems remain:

- We have not done a very good job over the past ten years of helping rural Americans get ambulatory care. The typical rural citizen is twice as likely never to have had a physical examination, as the typical citizen of a large metropolitan area. Many rural women fail to receive basic early cancer detection examinations.
- In our inner cities, minority citizens still lag far behind others in their access to physician care. Polio immunization rates for black children under the age of four are one-third lower than the rates for white children.
- Here in the State of California, of 1.2 million eligible poor children, only 20,000, — less than two percent — have been reached by a joint State-Federal early screening diagnostic and treatment program. Only 12,000 of these children — 1 percent — have been treated. This Administration has proposed new legislation — the Child Health Assessment Program — to correct this intolerable situation on a nationwide basis.

Yet, while some are starving for health care, obesity is commonplace for others. Nationwide

we have an excess of some 100,000 hospital beds. There are enough cat scanners in Southern California for the entire western United States.

We have made progress in absolute numbers in ending the doctor shortage of 10 years ago; but doctors are unevenly distributed, geographically and by specialty. Manhattan has 800 doctors per 100,000 people; Mississippi, fewer than 80. In some disciplines, we have too many specialists, while the desperate need for primary care physicians in many rural areas persists.

And so we face a major national challenge: to redirect the flow of new health resources into underserved areas and to underserved groups so that ultimately all Americans will have fair access to quality health care. And we must ask: Can we do this in an industry with virtually no competition? Indeed in an industry where the economic incentives move in the opposite direction?

Second, not only are our health care resources poorly distributed — they are often not organized as efficiently as they might be.

As physicians have moved to more lucrative practices in the suburbs, for example, the burden of providing primary medical care in our

inner cities has fallen increasingly on the outpatient departments of large metropolitan hospitals. Yet the cost of this kind of care is high: For many patients, two or three times higher than the same services offered in other settings, such as Health Maintenance Organizations and community health centers.

We have not made much progress in using non-physician health professionals to take some burdens off the physician — even though we know that nurses, physician assistants and other primary health practitioners can less expensively assume many tasks traditionally performed by physicians, without lowering the quality of care. Licensure laws are essential to preserve and maintain professional standards, but they should not be permitted to inhibit the development of new patterns of care.

Third, with little incentive to be cost effective in the use of skills and resources, it is no wonder that our present health-care system emphasizes acute care over prevention. Because of this, we are needlessly risking illness and sometimes even lives and recklessly consuming resources that could be used to meet other urgent needs.

Today the health-care challenge is dramatically different from what it was ten or twenty years ago. Today the leading killers are not

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communicable diseases, but accidents, heart disease, cancer, cirrhosis of the liver — which are often caused by people's lifestyles or by hostile influences in the environment.

Yet, our health-care system is not really geared to the field of prevention aimed at these killers.

We could literally save thousands of lives that are now being stunted or lost — if we could reduce the ravages of:

- Cigarette smoking, which kills through cancer, heart attack, and emphysema.
- Alcoholism, and its toll in mortality, morbidity and the destruction of family life.
- Obesity, with its sinister companions, diabetes and hypertension; and
- Accidents, which kill and maim in the office, at home, and on the highway.

In the case of each of these killers, we already have enough knowledge to make major lifesaving gains. What we lack is sufficient will and ingenuity in educating our fellow citizens about how to live more safely and sensibly. And we sorely lack a health-care system with economic incentives as strong to prevent as they now are to cure, one which makes prevention as profitable for providers as treatment now is.

Fourth, our system of health insurance in America is an expensive and inequitable crazy quilt.

Some eighteen million Americans — most of them unemployed or employed in small non-manufacturing businesses — have no health insurance at all.

Another nineteen million Americans — most of them with incomes between \$5,000 and \$10,000 — have no group insurance, only skimpy individual coverage that is at best inadequate.

Nearly half the population under age 65 does not have insurance that is sufficient to cover major medical expenses. National Health Insurance to protect all Americans from the crushing burden of medical expenses is essential. And I am pleased to note that you agree on the need and have been developing your own plan.

Which brings me to the overarching problem of the health care industry in America: The problem of runaway costs. In part because of these other problems I have sketched, the cost of medical care is soaring today.

Not only is health care spending devouring an ever larger share of our Gross National Product, but, under current projections:

- Total health expenditures will double by 1980;
- Hospital costs paid for by Medicare and Medicaid will double even sooner;
- If unchecked, total hospital costs could reach \$220 billion by 1985.
- Health care is rising at a rate of two and one half times the rise in the cost of living.

This rapid inflation imperils the ability of uninsured people to get health care at all. It gobbles tax dollars at such a rate that they are not available for other public priorities. The federal government spends 12 cents of every taxpayer dollar on health care. The average American worker works one month each year to pay health care costs.

Clearly, the health care industry, as presently structured, has become a problem for all of us — patients, physicians, providers of care, and public officials. Certainly we can understand why the American consumers and taxpayers — and more and more top executives of large corporations — are demanding that something be done.

Thus far, the Administration has pressed forward on the cost front, as you know. The President has sent to the Congress legislation that would control the precipitous rise in hospital costs — the most inflationary sector in the health industry.

But we recognize that the proposal we have put forward — a limit on increases in total hospital revenues — is merely a stop-gap solution that is a necessary transition to more profound structural, long-term reform.

For the long term we must begin to organize health resources more effectively, distribute health care benefits more equitably, emphasize prevention and primary care, and establish a fair and effective system of national health insurance.

Why have I spoken to you at such length about all these problems: Because you, more than any other members in the health care system, are its leaders and decision makers.

In past generations, your profession has led this nation to some striking achievements: a longer lifespan for our citizens; lower infant mortality, the near-elimination of many infectious diseases a rigorous system of medical education.

In the future, we must not only protect those life-saving gains; we must face another, wholly new set of challenges:

- The challenge of dramatically improving the cost-efficiency of our health care system;
- The challenge of re-directing our health efforts towards prevention as well as acute care.

Those are not challenges laid down by a government bent on ever-increasing regulation. They are demands that come from the American people and public officials, and increasingly from many of your own member physicians, who are urgently concerned about both the medical and economic health of our people.

So the government — representing the people and the consumers — must play an increasing role in health care. We will fulfill our responsibility best with your help and cooperation: but we must fulfill our responsibility nonetheless.

There are hard choices ahead; there are difficult decisions. We ask you to help us to act thoughtfully; to join with us in seeking solutions to these problems.

I believe that the American people would prefer — as I, and presumably you, would prefer — that the leadership in solving these problems come from within the health care system — from you — rather than from outside of it.

Some physicians are, in fact, providing such leadership.

- A large group of physicians are now partners with us in the management and operation of the PSRO program. These physicians are establishing standards, reviewing quality and sharply examining the appropriateness of care given by other physicians. We intend to expand and strengthen the PSRO program.
- Recently, a leading obstetrician expressed serious concern about rising OB costs and spoke out for dramatic consolidation of facilities to produce quality obstetrical care.
- Medical schools and a growing number of physicians are responding to our need for primary care.
- Some surgical specialists are taking the lead in a critical self-examination of excess surgery.
- More and more physicians are joining and starting HMO.

These are progressive steps. We hope many more physicians will begin taking them.

The story is told that Winston Churchill once paid a visit to his doctor because he was feeling terrible. His doctor, after carefully examining him, said, "Mr. Prime Minister, if you want to feel better, I suggest you cut back drastically on your consumption of brandy and cigars."

Whereupon Churchill fixed a withering stare on his doctor and replied: "My good man, I have no intention of doing either. That is why I have come to you."

And that, in fact, is what all of us have been doing for too long in this field of health care: using our affluence to cure problems, rather than our ingenuity and self-discipline to prevent them. We have not been willing to confront the hard fact that resources are limited and that we must find new methods to provide quality health care to all Americans at reasonable cost.

Now, the cost of our indulgence — like the cost of Mr. Churchill's indulgence — is catching up with us. We can no longer buy our way out of our difficulties. We must *think* our way out.

Thank you. □

DEATHS

C. A. GALLAGHER, MD
1911-1977

C. A. Gallagher, MD, Oklahoma City physician, died June 28th, 1977. Born in Stillwater, Dr Gallagher, 66, was graduated from the University of Oklahoma College of Medicine in 1937. His practice was established in Oklahoma City in 1938. He was a member of the Oklahoma Surgical Society and the Association of the American College of Emergency Physicians.

RICHARD E. STONE, MD
1943-1977

Richard E. Stone, MD, Muskogee physician, died in June. A native of New York City, Dr Stone was graduated from the University of Oklahoma College of Medicine in 1970. Following two years of residency training in internal medicine, Dr Stone began his practice at the Veterans Administration Hospital in July, 1976. He had planned to begin his third year of residency at Tulsa Medical School this fall. □

DOCTOR, WHAT WILL YOU EARN?

It depends, of course, on your age and annual earnings, but the amount can quite reasonably exceed \$400,000.

The total value of all your possessions — property, savings, cars and personal belongings — is only a fraction of what you will probably earn during years of practice. And yet some of you have insured these things and left your earning power unprotected.

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OSMA Officers and Trustees Named

The following is a list of officers and trustees who will serve the Oklahoma State Medical Association during the coming year. The term of office for most officers expires at the next annual meeting, which will be held May 4th-7th in Oklahoma City. The term of office for trustees and AMA delegates is indicated after their names.

OFFICERS

President: C. S. Lewis, Jr., MD, Tulsa; President-Elect: Marvin K. Margo, MD, Oklahoma City; Vice-President: M. Joe Crosthwait, MD, Midwest City; Secretary-Treasurer: Armond H. Start, MD, Oklahoma City (1979); Speaker, House of Delegates: S. N. Stone, MD, Oklahoma City; Vice-Speaker, House of Delegates: Jack D. Fetzner, MD, Woodward; Chairman, Board of Trustees: J. B. Eskridge, III, MD, Oklahoma City; Vice-Chairman, Board of Trustees: Frank W. Clark, MD, Ardmore; and Immediate Past-President: Orange M. Welborn, MD, Ada.

AMA DELEGATES AND ALTERNATES

AMA Delegates: Ed L. Calhoon, MD, Beaver, 1979; Scott Hendren, MD, Oklahoma City, 1978; and Harlan Thomas, MD, Tulsa, 1978. Alternate Delegates: M. Joe Crosthwait, MD, Midwest City, 1979; Rex E. Kenyon, MD, Oklahoma City, 1978; and Orange M. Welborn, MD, Ada, 1978.

TRUSTEES AND ALTERNATES

District I (Craig, Delaware, Mayes, Nowata, Ottawa, Rogers, Washington Counties): Elvin M. Amen, MD, Trustee, Bartlesville, 1979, and Edward W. Allensworth, MD, Alternate Trustee, Vinita, 1979; District II (Kay, Noble, Osage, Pawnee, Payne Counties): Thomas C. Glasscock, MD, Trustee, Ponca City, 1979 and Richard F. Harper, MD, Alternate Trustee, Pawhuska, 1979; District III (Garfield, Grant, Kingfisher, Logan Counties): Ray V. McIntyre, MD, Trustee, Kingfisher, 1979, and Joe B. Jarman, Jr., MD, Alternate Trustee, Enid, 1979; District IV (Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Major, Texas, Woods, Woodward Counties): M. K. Braly, MD, Trustee, Woodward, 1979, and John X. Blender, MD, Alternate Trustee, Cherokee, 1979; District V (Beckham, Blaine, Canadian, Custer, Roger Mills Counties): F. W. Hollingsworth,

MD, Trustee, El Reno, 1979, and William M. Leebron, MD, Alternate Trustee, Elk City, 1979; District VI (Oklahoma County): J. B. Eskridge, III, MD, Trustee and Chairman of the Board, Oklahoma City, 1980, Kent Braden, MD, Trustee, Oklahoma City, 1980, Perry A. Lambird, MD, Alternate Trustee, Oklahoma City, 1980, and Kenneth W. Whittington, MD, Alternate Trustee, Bethany, 1980; District VII (Cleveland, Creek, Lincoln, Okfuskee, Pottawatomie, McClain Counties): James D. Brashear, MD, Trustee, Norman, 1980, and Clinton Gallaher, MD, Alternate Trustee, Shawnee, 1980; District VII (Tulsa County): Edward K. Norfleet, MD, Trustee, Tulsa, 1980, Duane E. Brothers, MD, Trustee, Tulsa, 1980, Dave B. Lhevine, MD, Alternate Trustee, Tulsa, 1980, and George H. Kamp, MD, Alternate Trustee, Tulsa, 1980; District IX (Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner Counties): Burdge F. Green, MD, Trustee, Stilwell, 1980, and Wilbur K. Baker, II, MD, Alternate Trustee, Muskogee, 1980; District X (Haskell, Hughes, Latimer, LeFlore, Pittsburg, Seminole Counties): Jack W. Parrish, MD, Trustee, Seminole, 1980, and Delta W. Bridges, Jr., MD, Alternate Trustee, McAlester, 1980; District XI (Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha Counties): B. R. McCann, MD, Trustee, Durant, 1978, and Thomas E. Rhea, MD, Alternate Trustee, Idabel, 1978; District XII (Carter, Garvin, Johnston, Love, Marshall, Murray, Pontotoc Counties): Frank W. Clark, MD, Trustee, Ardmore, 1978, and Clarence P. Taylor, MD, Alternate Trustee, Ada, 1978; District XIII (Caddo, Comanche, Cotton, Tillman, Grady, Jefferson, Stephens Counties): Paul N. Vann, MD, Trustee, Lawton, 1978, and A. Craig Roberson, MD, Alternate Trustee, Anadarko, 1978; District XIV (Greer, Harmon, Jackson, Kiowa, Washita Counties): Lowell N. Templer, MD, Trustee, Altus, 1978, and Fred W. Sellers, MD, Alternate Trustee, Mangum, 1978. □

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Cobalt Facility Dedicated

H. T. Ballentine, Jr., MD, is shown above inspecting the Ballentine Cobalt Facility at the Muskogee General Hospital, which is named after his father, H. T. Ballentine, Sr. Dr. Ballentine, Sr. practiced medicine in Muskogee from 1909 until his death in 1970 and set up a trust fund which made the Muskogee Cobalt Facility possible. Dr. Ballentine, Jr. was in Muskogee during April to attend dedication ceremonies and to take part in the Exchange of Medical Information Program, during which he lectured in Muskogee, Tulsa and Oklahoma City. Dr. Ballentine, Jr., who was born in Muskogee, now practices neurosurgery in Boston and is a clinical professor of surgery at the Harvard Medical School. He was also recently elected to the American Medical Association's Board of Trustees. □

Two OSMA Councils Hold First Meetings of the Year

Editor's Note: In the future, The Journal of the Oklahoma State Medical Association will feature abbreviated reports on the meetings of the eight OSMA Councils. These reports will highlight the action taken during Council meetings and are designed to keep member-physicians abreast of happenings in their association.

The OSMA Council on Public and Mental Health has given tentative approval to a public education program emphasizing the importance of all persons learning how to perform cardiopulmonary resuscitation. Although the program is still in its planning stages, the council voted at its July 6th meeting to endorse the public education plan and to ask the Council on Professional and Public Relations to cooperate in the planning stages.

The Public and Mental Health Council plan calls for a statewide program to be conducted

utilizing already established CPR training mechanisms. The Council on Public and Mental Health will ask the OSMA Council on Professional and Public Relations to produce a public service announcement to be used in the program.

In other action the council also voted to go on record as endorsing the state health department's cervical cancer screening program and will plan to back funding of this program during the next legislative session. Council members pointed out the importance of this program as far as saving lives and testified that the cost-benefit ratio was very good.

Council members also discussed what roles the already established Committee on Maternal Mortality should fulfill, and additionally set informal guidelines for the new Committee on Environmental Quality. Armond H. Start, MD, council chairman, gave a report on influenza immunization plans for the coming year and also reported on the current immunization schedule.

The OSMA Council on Governmental Activities met on June 26th at OSMA headquarters to interview two applicants for the job as OSMA legislative consultant. This position was endorsed and funded at the OSMA annual meeting in May. It calls for the OSMA to retain the part-time services of a lobbyist in Washington in an effort to better represent Oklahoma physicians in federal matters.

John Fochtman, formerly a lobbyist for the American Medical Association, and John Montgomery, the lobbyist for the City of Oklahoma City, were interviewed by the council. No final recommendation was made, and a final decision is not expected until later in August.

The Governmental Council also discussed a legislative survey which was mailed to all OSMA members in July. That survey will be used to identify OSMA members that have legislative or administrative contacts, either locally or in Washington. The council asks your cooperation in filling out and returning the survey.

Other items of discussion were a series of new health forums which will be held across the state later in the year and which will feature appearances by Oklahoma congressmen. The health forums are designed to bring Oklahoma senators and representatives face to face with Oklahoma physicians in an informative question and answer series. □

Emergency Room Misuse Cited

The hospital emergency room and the physician's office are viewed by many Americans as interchangeable sources of medical treatment, according to a survey in the *American Medical News*. The survey, conducted by the Roper Organization for the American Hospital Association, shows that the main reason many people prefer to go to emergency rooms for treatment of injuries is the belief that the hospital has better treatment facilities than the physician's office.

In releasing the results of the survey, the AHA noted that 94 percent of reporting community hospitals now have emergency rooms, and that virtually all hospitals with 200 or more beds have emergency room service.

The AHA said that increased use of emergency room facilities is the most significant factor in the 103 per cent increase in outpatient utilization during the past 10 years. AHA spokesmen estimated that 63 percent of its hospitals have established a formal screening process in order to cope with the overloading of emergency facilities due to non-urgent requests for care. Some non-emergency patients, they said, who arrive during daytime hours, are being referred elsewhere for care.

The OSMA Council on Professional and Public Relations has recently produced a public service announcement which stresses the need for proper utilization of hospital emergency rooms. This announcement, along with announcements describing how to find a physician and the need for up-to-date immunizations have been distributed to all state television stations as a public service of your medical association. □

Infant Medical Bill Explained

On March 11th, 1977, Governor David Boren signed into law a bill which defines the rights of infants born alive in the course of an abortion. This piece of legislation, which became effective immediately after being signed, simply states, "The rights to medical treatment of an infant prematurely born alive in the course of an abortion shall be the same as the rights of an infant of similar medical status prematurely born."

The OSMA Legislative Committee reviewed this bill during the legislative session and neither endorsed nor opposed the piece of legislation. According to the Legislative Commit-

tee, the bill, SB 194, does nothing other than put into law an already existing ethical obligation. The Legislative Committee did attempt to include a definition of "alive" in the bill, but was unsuccessful. □

Laetrile Bill Approved

On June 21st Oklahoma Governor David L. Boren signed into law a bill which legalizes the prescription/administration of Laetrile in Oklahoma and which prevents disciplinary action against doctors and hospitals who administer the drug. The bill, HB 1324, was originally introduced by Representative Tom Stephenson, Watonga, and was opposed by the Oklahoma State Medical Association. When Governor Boren signed the piece of legislation, Oklahoma became the 8th state to permit the use of Laetrile. At press time there were 11 states in which similar legislation had been passed.

The Laetrile legislation was originally introduced into the House of Representatives and was assigned to the Public Health Committee. It was given a Do Pass recommendation on February 15th, and on March 2nd it passed the full House by a vote of 71-23. In the Senate it was originally assigned to the Committee on Agriculture where it received a Do Pass recommendation. It was then sent to the Senate Committee on Public and Mental Health where it was unanimously approved. Before this last committee gave its approval, however, several amendments were added to the bill, including a "written informed request" form which was to be prepared by the State Board of Health. This amended version was then given Senate approval on May 25th by a vote of 47-1. The House later approved the Senate's revised version of the bill, and Governor Boren signed it into law.

Shown below are the important sections of the bill as it was approved.

House Bill No. 1324

AN ACT RELATING TO PUBLIC HEALTH; LIMITING RESTRICTIONS ON USE OF LAETRILE; PROHIBITING DISCIPLINARY ACTION AGAINST PHYSICIANS FOR PRESCRIBING OR USING LAETRILE; PERMITTING LAETRILE USE; PRESCRIBING INFORMED REQUEST FORM; LIMITING REGULATORY POWER OF STATE BOARD OF HEALTH; DIRECTING CODIFICATION; AND SETTING AN EFFECTIVE DATE.

BE IT ENACTED BY THE PEOPLE OF
THE STATE OF OKLAHOMA:

SECTION 1. No hospital or related institution in the State of Oklahoma may restrict or prohibit the use of amygdalin (laetrile), which shall be chemically defined as Laevo-mandelonitrile-beta Glucuronoside, as an adjunct to recognized, customary or accepted modes of therapy in the treatment of any malignancy, disease, illness or physical condition when it is prescribed or administered by a physician licensed to practice medicine in this state and the patient has signed the "written informed request" therefor as set forth in Section 5 of this act.

SECTION 2. A physician licensed to practice medicine in this state shall not be subject to disciplinary action by the State Board of Medical Examiners for prescribing or administering amygdalin (laetrile) to a patient under his care as an adjunct to recognized, customary or accepted modes of therapy in the treatment of any malignancy, disease, illness or physical condition, if and when the patient has given informed consent and has signed the "written informed request" therefor as set forth in Section 5 of this act, unless said physician acted negligently concerning his diagnosis, care and treatment of said patient.

SECTION 3. A physician may prescribe or administer amygdalin (laetrile) as an adjunct to recognized, customary or accepted modes of therapy in the treatment of any malignancy, disease, illness or physical condition of a patient who has signed the "written informed request" as set forth in Section 5 of this act.

SECTION 4. Nothing in this act shall be construed as constituting an endorsement of amygdalin (laetrile) for the treatment of any malignancy, disease, illness or physical condition. Furthermore, nothing in this act shall require any licensed physician to prescribe or administer amygdalin (laetrile) to a patient under his care.

SECTION 5. The "written informed request" referred to in this act shall be on a form prepared by, and obtained from, the State Board of Health, shall be subject to the Board's continuing jurisdiction and control concerning any changes in the "written informed request" pursuant to law and shall be in substance as follows:

WRITTEN INFORMED REQUEST FOR
PRESCRIPTION OF AMYGDALIN
(LAETRILE) FOR MEDICAL TREATMENT

Patient's name: _____

Address: _____

Age: _____ Sex: _____

Name and Address of prescribing physician: _____

Malignancy, disease, illness or physical condition diagnosed for medical treatment by amygdalin (laetrile):

My physician has explained to me:

(a) That the manufacture and distribution of amygdalin (laetrile) has been banned by the Federal Food and Drug Administration.

(b) That neither the American Cancer Society, the American Medical Association, nor the Oklahoma State Medical Association recommend the use of amygdalin (laetrile) in the treatment of any malignancy, disease, illness or physical condition.

(c) That there are alternative recognized treatments for the malignancy, disease, illness or physical condition from which I suffer which he has offered to provide for me including: (Here describe)

That notwithstanding the foregoing, I hereby request prescription and use of amygdalin (laetrile) in the medical treatment of the malignancy, disease, illness or physical condition from which I suffer.

Signature of Patient

ATTEST:

Prescribing Physician

A copy of such "written informed request" shall be forwarded forthwith after execution thereof to the State Board of Health for appropriate filing.

SECTION 6. The State Board of Health may regulate the distribution, standardization and sale of amygdalin (laetrile) for use within the state only to insure that the substance is not adulterated or misbranded within the meaning of Sections 1-1401 through 1-1409 of Title 63 of the Oklahoma Statutes. ☐

Physician Manpower Grows

Over the past 50 years, the physician population in the United States has been growing twice as fast as the general population. Production of new physicians has been accelerating in recent years, while the growth rate of the general population has been slowing.

As a consequence, the physician population since 1970 has been increasing more than four times faster than the US population as a whole.

In 1975, there were about 543 potential patients for every physician in the US. In 1970, the ratio was 613 persons per physician; and the figure in 1925 was 781. By 1980, according to an HEW projection, the population per doctor ratio is expected to be reduced to 490.

Part of the reason for growth of physician manpower has been an increase in the number of US medical schools, accompanied by an increase in the annual number of medical school graduates. The 13,561 graduates in the 1975-76 school year were nearly double the number of graduates in 1960-61.

Foreign-trained physicians, too, have contributed to the growth of physician manpower. These include foreign nationals and Americans who received their medical training outside the US or Canada. About one of every five physicians in the US is a foreign medical school graduate. However, the recently enacted Health Professions Assistance Act is expected to decrease somewhat the future role of foreign-trained graduates.

Measures of physician manpower in the US are not precisely comparable with those of other countries, because the criteria for medical education and licensure differ from country to country.

(The US standards are among the highest in the world.) Among leading industrial nations, the US has one of the highest ratios of physicians per 100,000 population.

Table 1

Number of Physicians Compared to US Population (historical trends and projections)

Year	Number of physicians*	Total US population (millions)**	Physicians per 100,000 population
1925	148,665	115.8	128
1950	219,997	152.3	144
1960	260,484	180.7	144
1965	292,088	194.3	150
1970	334,028	204.9	163
1975	393,742	213.6	184

PROJECTIONS:

1980	457,182	224.0	204
1985	530,705	236.0	225
1990	606,779	247.0	246

*Federal and non-federal physicians.

**1925 is resident US population; for all other years, includes overseas-based US armed forces.

Sources: (1) Louis J. Goodman, "The Supply and Availability of Physician Services," AMA Center for Health Services Research and Development, March 1977. (2) Projections from HEW, "The Supply of Health Manpower: 1970 Profile and Projections to 1990," 1974.

Table 2

Students and Graduates in US Medical and Basic Sciences Schools

School Year	Number of Schools	Total Enrollment	First Year Enrollment	Graduates
1935-36	77	22,564	6,605	5,183
1950-51	79	26,186	7,177	6,135
1960-61	86	30,288	8,298	6,994
1965-66	88	32,835	8,759	7,574
1970-71	103	40,487	11,348	8,974
1975-76	114	56,244	15,351	13,561

PROJECTION:

1980-81	114*	Not available	16,063	15,512
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*Based on current expansion plans of the present 114 medical schools. (Two or more additional schools are expected to be accredited by 1980.)

Source: American Medical Association, *JAMA*, "Medical Education in the United States," December 27, 1976.

Table 3

Number of Physicians per 100,000 Population in Selected Countries (1972 data)*

Country	Physicians per 100,000 population
United States	165
Canada	158
France**	141
West Germany	184
Japan	116
Netherlands	136
Sweden	147
England & Wales	131

*Latest year for which comparable data are available.

**Includes overseas departments of France.

Source: World Health Organization, *World Health Statistics*, 1972, Geneva, 1976. □



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Discipline Actions Against Doctors Triple in Five Years, AMA Reports

Statistics compiled by the American Medical Association from 47 states show that the number of disciplinary actions against physicians has tripled in the past five years.

In 15 states which have enacted legislation making the reporting of professional malpractice mandatory, the number of investigations initiated by the state medical disciplinary bodies has increased six-fold.

Much of this six-fold increase can be attributed to the immunity provisions for those required to report under these laws, said James H. Sammons, MD, Executive Vice-President of the AMA. Dr Sammons reported on the survey to the AMA House of Delegates convening in San Francisco, June 19th.

"Doctors are willing to discipline the profession, but we need more clout," declared Dr Sammons in urging other states to adopt the tougher disciplinary laws.

The AMA chief executive pointed out that medical societies have no disciplinary authority other than to censure and expel from membership, which doesn't stop the doctor from

practice of medicine. More stringent discipline — placing on probation or revoking licenses — is handled by the state medical licensing board in each state, he said.

When state law makes it mandatory for a physician to report a colleague who is believed to be guilty of malpractice, and provides immunity for such reporting, the physician may do so without fear of civil liability to the reported doctor. Alabama, Arizona and Idaho have enacted such laws.

In a study of the actions of the nation's medical disciplinary boards, the AMA found the number of disciplinary actions initiated rose nationwide from 1,275 in 1971 to 4,236 in 1976. The number of licenses revoked rose from 45 in 1971 to 130 in 1976. The number of physicians placed on probation rose from 57 in 1971 to 185 in 1976.

In summarizing activities in the area of coping with physicians who have problems with alcohol or narcotics, Dr Sammons pointed out that more state licensing boards can now intervene and take action before harm is done.

Also, some 25 state medical societies have initiated impaired physician programs.

There are no definite studies that provide a

concise, scientifically valid count of impaired physicians. There are only estimates. The AMA estimates that four to five percent, or 17,000, out of a total of more than 400,000 physicians may have impairments such as alcohol or narcotic addiction.

Model state legislation relating to impaired physicians drafted by the AMA seeks to meet the problems in a number of ways, including allowing for rehabilitation of physicians with problems, while providing for removal from practice or restriction upon the practice of those who endanger their patients. The model legislation was drafted in 1974, and the AMA has held two national conferences on the impaired physician.

State medical societies have also taken an active role . . . their activities fall into three categories. First is the completely independent and voluntary program, such as the Oklahoma State Medical Association's Physicians' Committee. Second is the medical society program closely linked to a state program through the licensing boards, in Florida, Maryland, Arkansas, and Kentucky. The OSMA has established a similar program with an expanded Grievance Committee on a one-year trial basis. Third is the combined "coercive and non-coercive" programs within the medical society, in Georgia, Utah, Washington and Minnesota. □

AMA Delegates Reaffirm Stand on NHI

Once again national health insurance was the main topic as AMA delegates from throughout the country gathered in San Francisco for the annual meeting of the American Medical Association. For the third straight session of the House, national health insurance brought heated debate, but the AMA/NHI proposal was once again endorsed. Endorsement was given despite the strong opposition of the AMA's more conservative delegates who were led by F. Michael Smith, MD, Louisiana.

The principal spokesman for the AMA/NHI plan was Joe Boyle, MD, an AMA trustee from California, who appeared during 1976 at the OSMA annual meeting. Dr Boyle warned, "We know the Administration is out to get us. We just don't know how yet. We had better heed the warnings and keep AMA involved in the discussions."

Edgar Beddingfield, MD, Chairman of the AMA Council on Legislation, said conservative physicians criticize the AMA stand as being

too liberal, and the liberals in Congress describe the AMA as being too far to the right.

"Catching flak from both the right and the left, we might be right on target."

Dr Beddingfield said AMA sponsorship of national health legislation is important because it makes it possible for the national organization to take part in NHI debates. If we were to withdraw our support of the AMA's NHI bill, said Dr Beddingfield, we would "lose credibility on all issues."

Louisiana alternate delegate, Dr Smith, however, termed the AMA position "schizophrenic."

"We want to rub shoulders with those who would rob us of our freedom."

George Wilkins, MD, President of the Illinois State Medical Society, also opposed the AMA's stand on national health insurance because he said physicians in his state strongly oppose the position. He told the AMA House of Delegates that a poll of the state society had been taken, and that the vote was 202 to 5 against AMA sponsorship. Dr Wilkins warned that the time to fight NHI is now.

Eventually the AMA proposal received the House of Delegates' endorsement, although two amendments were added. One was a California amendment calling for a statement saying that physicians are opposed to "nationalization" of medicine to be added to the AMA bill. This amendment also instructed the Board of Trustees to analyze the bill and report back at the 1977 interim meeting which will be held in Chicago. Additionally, it invited county and state medical societies to submit their views on NHI within 60 days.

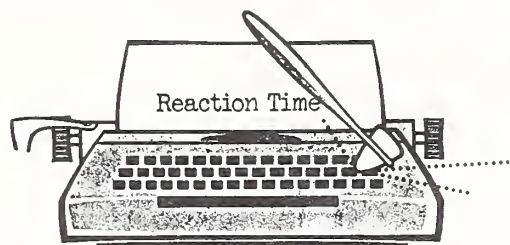
The second amendment was made by AMA Past-President Russell Roth, MD. He called upon all references in the AMA bill to "national" to be changed to "comprehensive." □

Pediatrics Symposium Planned

Tulsa's Hillcrest Medical Center will sponsor a symposium on "Pulmonary Diseases in Children" on October 15th, 1977. The program will be conducted by the Department of Pediatrics and is co-sponsored by the Oklahoma Chapter of the Cystic Fibrosis Foundation. The symposium will be conducted at Hillcrest Medical Center, Utica on the Park, in Tulsa.

Visiting faculty will be R. Michael Sly, MD, Louisiana State University Medical Center, New Orleans; and Lynn M. Taussig, MD,

Arizona Medical Center, Tucson. For additional information, contact Stephen J. Adelson, MD, Program Director, at Hillcrest Medical Center. □



May 18, 1977

Mark R. Johnson, MD
Editor-in-Chief
The Journal of the Oklahoma
State Medical Association
601 N.W. Expressway
Oklahoma City, Oklahoma 73118

Dear Mark:

I recently enjoyed a fine article, "William P. Longmire, Jr., MD, Gentleman, Surgeon, Teacher, Scholar", written by Michael F. McArthur, MD, printed in the "Journal" April 77, Vol. 70, pp 139-143, on the occasion of the announced retirement of a native Oklahoman, William Longmire, Jr. I would like to add an addendum to this excellent review of Dr Longmire's accomplishments.

Early in my practice in Okmulgee, Oklahoma, I encountered a patient from this community who wondered if I had ever run across a Dr Longmire whose father practiced in Sapulpa. It seems that this otherwise well-informed gentleman had lost contact with William P. Longmire, Jr. after Dr Longmire had closed his "Hop-Sing Laundry." I was stunned with disbelief that this fellow could have "known" William Longmire, Jr., and lacked knowledge or perception of his national prominence. This, in part, has precipitated my letter to better acquaint Oklahoma with Dr Longmire's contribution directly to surgical art and science in Oklahoma.

William P. Longmire, Jr., MD, was the first

guest of the Oklahoma Surgical Association, a society composed of Board Certified Surgeons in Oklahoma. Our first meeting was held in the spring of 1961, at the Ramada Inn in Oklahoma City, and featured Dr Longmire as our guest speaker and visiting professor. Dr Longmire presented two papers: The first related the management of childhood sarcoma using the perfusion of a combination of chemotherapeutic drugs. His second paper epitomized the humble and down-to-earth nature of this giant who came from Oklahoma to reach the greatest heights in the surgical world as we know it. The second article was entitled, "On the Opening of a Bridge Between Sapulpa and Tulsa." As Dr McArthur's article brought out, Dr Longmire's father was a general practitioner in Sapulpa, Oklahoma, and had been mayor of Sapulpa at the time the bridge was completed across the Arkansas River. Therefore, it was proper that he do the ribbon snipping on this occasion, and Dr Longmire, Jr., substantiated this event with several pictures and clippings from the Tulsa and Sapulpa papers.

In addition to his own presentations, Dr Longmire participated freely in the give and take discussion of all the other scientific papers which varied in quality, but were all by Oklahomans. I think it was the finest hour of this organization to have Dr Longmire's participation, and he became the first honorary member of the Oklahoma Surgical Association. I believe that the other members of this organization share my opinion, and though we have had outstanding surgeons as guest professors each year since 1961, we have never been blessed with a greater man and a surgeon than our initial guest, William P. Longmire, Jr., MD

Sincerely,

Joe L. Spann, MD

JLS:mlg;so

WATCH FOR CME COURSES

Beginning with the September issue, *The Journal* will present a list of the approved Continuing Medical Education Courses for the Physicians Recognition Award.

HEWmanitarianism

For the past several years we've been reading and hearing a lot about so-called "unnecessary surgery," the proliferation of sophisticated medical devices which are "outrageously expensive" (presented in a context which clearly implies that they are unnecessary, even worthless), and therapeutic and diagnostic procedures which are "too costly for widespread utilization."

There is little doubt that the source of this castigation is the US Department of Health, Education and Welfare (HEW) and its bubbling cauldron of bullish bureaucrats. Also, there can be little doubt that the objective of this damnation is to continue to strip down the actual costs of first-class, modern health care so that it will appear to be within reach of the resources of compulsory national health insurance. In short, it is a misrepresentation designed to promote a deception; a defamation to facilitate a fraud. Much of HEW's recent fire-belching has utilized identical tactics to accomplish the same objective.

Classic among many examples is the case of the computerized axial tomography (CAT) scanner. Recognized by most experienced clinicians as the most significant and most valuable diagnostic instrument to appear since the x-ray machine itself, the CAT scanner is a marvelous machine which, in its broadest application in clinical medicine, will result in saving billions of dollars otherwise spent in conducting more complex, more time-consuming and more hazardous procedures which provide less accurate and less definitive diagnostic information. And, since many traditional diagnostic procedures involve surgery, general use of the CAT scanner will result in a significant reduction in the number of operations, many of which, retrospectively, are considered "unnecessary."

Presumably, an instrument such as the CAT scanner would have the enthusiastic

endorsement of every agency which has a genuine concern about the quality and cost of health care in this country. But no — official voices from HEW have not paused in their damnation of the CAT scanner nor have their fingers wavered from pointing to it as the archetypical extravagance in our fat and foolish health care budget. Dripping with calumny, quivering with indignation, the voices of inexperience from HEW have directed all their subordinates, individual and collective to join the cacophony of protest and put a stop to the private purchase and hospital installation of CAT scanners.

With somewhat more than characteristic inanity the HEW mouthpieces have declaimed that patients (many of whom are critically ill or seriously injured and being maintained on life-support devices) can — henceforth — go to the CAT scanner (although it may be hours and miles away) rather than have the indicted devices come to the hospitals where the patients are. This in the name of economy, when HEW is spending millions of dollars in a witch-hunt search for a few fraudulent claims from fewer physicians, pharmacists and nursing home operators; when the Pentagon is squandering millions of dollars for invisible steel; and when our president deliberates for days before vetoing the construction of a fleet of bombers — each one costing in excess of \$120,000,000. But, say the rancorous voices from HEW, the CAT scanners, at several-hundred-thousand dollars apiece, are much too expensive and too fancy and too inconsequential to endorse. We have enough of them, if not too many already.

As physicians, we should feel relieved that we must no longer play God. That role has been assured by the bureaucrats in HEW. But how do we stop worrying about our patients' welfare in the face of this new deity, this new omnipotence, this new HEWmanitarianism? *MRJ*

Four months ago the House of Delegates approved an ambitious annual work program developed by the Council on Planning and Development. The wisdom of the new planning process becomes more apparent each day. For the first time in many years the association activities have become "Goal" oriented rather than "Crisis" oriented. This turn of events was accomplished because of the foresight of two former OSMA Presidents — Arnold Nelson, MD, who saw the need for reorganizing the association's council and committee structure, and Orange Welborn, MD, who actually accomplished the revision. The purpose of the new Council on Planning and Development is to review the objectives of each of the other seven OSMA councils and to mold them together into a comprehensive, *attainable* work program that represents the needs of all OSMA members. I'm devoting my President's page this month to an update of association activity, so you can see where your dues money goes.



The Council on Governmental Activities has just completed a statewide survey getting information to establish a legislative "Key Man" program. The returns exceeded our expectation, and we will soon have physicians assigned to each of our state legislators and congressional delegation. This improved communication with state lawmakers should result in a better understanding of medicine's views on political issues. OSMA's "Man in Washington" has been selected and I think all of us are anxious to see if this additional representation will improve our rapport at the nation's capitol. Plans for the first "Health Forum" will be announced soon. One congressman has already agreed to attend a session in Oklahoma City in late August, and others are being planned. These informal sessions, which will be scheduled in local hospi-

tals, will provide you the opportunity for direct input to congressmen and senators. I urge you to participate. The Council also plans to visit with Oklahoma's delegation in Washington at least twice this year. OSMA had another successful year in state legislative activities with several reform measures passed into law. The most significant of these is worker's compensation reform, and full details will be provided in separate articles of *The Journal*.

The Council on Medical Services' principal activity has been in the area of peer review. There are 47 physicians that serve on this committee, and they review about 35 cases every other month. In addition, they get involved in reviewing new and unusual modes of treatment to determine if they should be paid for by insurance carriers. This is one of the hardest working committees in the association, and it has improved the credibility of peer review with the public and the private insurance industry. The Council is also responsible for monitoring the activities of the Oklahoma Health Systems Agency, which is the government approved health planning organization of the state. There are over 240 people involved in the state's health planning process, and only about 30 are physicians. The unpleasant task of attending meeting after meeting is being accomplished by OSMA members on the various subarea and state boards, an essential commitment if we are to influence the health planning processes. The Council on Medical Services plans to publish a newsletter on health planning activities which you should start receiving in the near future.

The Council on Members Services is responsible for the association's insurance programs and is already working on malpractice coverage for 1978. While we are grateful for the excess limits program the Council was able to secure for '77, most of us feel a more traditional insurance program is preferred. Fortunately, the Council has received inquiries from four major insurers about writ-

ing the insurance in 1978, a complete reversal of the situation last year when no companies were interested in the excess limits program, and few were interested in the primary coverage. The underwriting that the Council has provided over the years is responsible for the renewed interest of the insurance companies, and hopefully we will soon announce details of the 1978 program. It is important for you to know that one of the reasons our group is attractive to major companies is the cohesiveness of Oklahoma physicians and the willingness of our organization to review and discipline its members. Our revised Grievance Committee procedure has already demonstrated that it creates more effective "peer review," and while these are difficult and unpleasant tasks, it is necessary that we demonstrate to the public and others that we are willing to police ourselves. The Council is embarking upon an active recruitment program for those physicians in the state who are not members of the association, and a membership brochure will soon be published.

Our Professional and Public Relations efforts have also been improved. *The Journal of the Oklahoma State Medical Association* is now being published the first of each month rather than the middle and latter part as in the past. Our new newsletter format is more direct and subject oriented, and I have received letters from some voicing their approval of the new format. Many of the state's doctors have participated in the two TV programs for which the Council has provided physicians. The public service announcements that were shown during the annual meeting have now been distributed to TV stations across the state, and you should soon be seeing PSA's in your area.

The Council on Public and Mental Health plans to sponsor training programs for community cardiopulmonary resuscitation courses. CPR techniques will be taught by local physicians with help from the Heart As-

sociation and Council representatives. The new immunization schedule has been approved and has been distributed. Because of the problems involved with the thyroid cancer screening program approved at the annual meeting, this project has been delayed indefinitely or until such time as additional research can be done.

One of our major activities is the program underway by the Council on Medical Education. We have already held a briefing session with the AMA on our hospital accreditation plans, and the first site review of a hospital has already taken place. All of the state's hospitals that seek accreditation will be reviewed by early fall. This is in preparation for providing the continuing medical education that becomes a requirement of association membership in January, 1978.

Our new Council on Scientific Assembly has been organized and will work with the Council on Medical Education in preparing and conducting CME courses statewide. The socioeconomic seminars have been scheduled, and you should be alert for one in your area. These one-day sessions are for the purpose of improving your skills and the skills of your office employees in the business aspects of medical practice.

Finally, the Summit Committee has already begun work on next year's annual meeting, and I think we can anticipate a good program next May.

There are many other activities in which the association is involved. With the help of a very active Executive Committee, your officers continue to work on the goal-oriented work plan, and as you can see from the highlights mentioned above, we are already making strides toward accomplishing our objectives for this administrative year.

C. S. Lewis Jr. M.D.

The Cephalosporin Antibiotics: Results of Laboratory and Clinical Studies In 312 Infants and Children

HARRIS D. RILEY, JR., MD
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The results of extensive studies of four cephalosporins are described. Therapeutic response was considered satisfactory in 78%, indicating that these agents are effective and produce toxic reactions uncommonly in infants and children.

In 1945, the fungus *Cephalosporium* was recovered by Brotzu from the waters of the Mediterranean Sea off the coast of Sardinia. This organism, identified as *Cephalosporium acremonium*, was found to elaborate antimicrobial substances.¹ Later investigation at Oxford University and at the Antibiotic Research Station in Clevedon showed that the fermentation products of the fungus contained a penicillin with a side chain derived from D-

alpha-amino adipic acid. It was named cephalosporin N and was found to be identical to synnematin, a compound which had been studied for antimicrobial activity in the United States. The antimicrobial activity of cephalosporin C, another compound isolated from *Cephalosporium*, was approximately one-tenth that of cephalosporin N, from which it differed in two important respects — its nucleus was different from that of penicillin and it was resistant to penicillinase. A third antibacterial agent recovered from the fermentation products of the fungus proved to be a steroid effective only against gram-positive cocci and was called cephalosporin P.¹⁻³ Abraham and co-workers^{1, 2} successfully removed alpha-amino adipic acid from the molecule of cephalosporin C to produce 7-amino-cephalosporinic acid (7-ACA), which is quite similar in structure to 6-amino-penicillanic acid (6-APA), the nucleus of penicillin G. Following this, a chemical approach to cleavage of cephalosporin C was developed which made 7-ACA available in practical quantity. The attachment of various side chains to 7-ACA influences markedly the antibacterial activity of the drug and has led to the development of a number of different antimicrobial agents. At present, four clinically useful agents have been synthesized: cephalothin, cephaloridine, cephaloglycin, and cephalixin.

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All have bactericidal action against a wide variety of gram-negative and gram-positive organisms and are resistant to penicillinase.² Unlike cephaloglycin and cephalixin, cephalothin and cephaloridine are poorly absorbed orally and can be administered only by the parenteral route.⁴

Clinical and laboratory evaluations of these four derivatives have been conducted in the Pediatric Pharmacology Unit at the Children's Memorial Hospital, University of Oklahoma Health Sciences Center. This communication reports the results of microbiologic and pharmacologic studies as well as the therapeutic results accumulated in management of over 300 children with a variety of gram-positive and gram-negative infections.

MATERIALS AND METHODS

Clinical Population and Studies: A total of 312 patients, including 176 males and 136 females, were treated with the cephalosporins. Although patients ranged in age from birth to 28 years, the great majority were infants and children. Many had serious underlying life-threatening conditions, and the majority had been treated unsuccessfully with other antibiotic agents. Patients with infections found or suspected to be due to an organism likely to be susceptible to one of the cephalosporins were admitted to the study. In general, study patients with serious or potentially serious diseases received cephalothin or cephaloridine; those with less serious disorders, particularly those treated as outpatients, received cephaloglycin or cephalixin. In some patients requiring prolonged treatment, therapy was initiated with cephalothin or cephaloridine and completed with cephaloglycin or cephalixin. Therapeutic results were considered satisfactory if cultures reverted to negative during therapy and the clinical response was adjudged satisfactory.

Depending on the nature and site of the infection, appropriate bacteriologic cultures were obtained before, during, and after therapy. Laboratory surveillance included hemograms and urinalyses on all patients before and twice weekly during treatment. Serum glutamic oxalacetic transaminase (SGOT), blood urea nitrogen (BUN), and serum alkaline phosphatase levels were monitored in a large segment of the patients to screen for possible toxic effects of the drugs.

Drug Forms and Dosage: Cephalothin and cephaloridine were supplied in 0.5-gm vials in the form of white powder. Each was reconstituted with saline or distilled water and given parenterally, usually 50 to 100 ug/kg/24 hours, in divided doses every six to eight hours. Cephaloglycin was furnished in 250-mg capsules and in a powder for oral suspension, delivering 250 mg/5cc after reconstituting with tap water. Cephalixin was supplied in 250 and 125-mg capsules and in powder for oral suspension, delivering 125 mg/5cc after reconstituting with tap water. Dosage for cephaloglycin and cephalixin was 50 to 100 ug/kg/24 hours, given in equally divided oral doses every four to six hours.

Laboratory Methods: The bacterial strains isolated from patients were identified by standard methods in the Infectious Disease Laboratory of Children's Memorial Hospital.

In-vitro susceptibilities to cephalothin, cephaloridine, cephaloglycin, and cephalixin were determined by both disc (using a 30-ug disc*) and tube dilution methods. The culture material was incubated in a brain-heart infusion broth (Difco) for 24 hours at 37°C, then confluent streaked on appropriate susceptibility test medium (COLAB) and the test discs were applied. Susceptibility was judged by the major zone of inhibition surrounding the test disc. Susceptibility patterns were determined by the tube dilution method for a significant segment of the isolates, except in the case of cephaloglycin, because of the instability of this compound and the resulting unreliability of the findings. Freshly grown, overnight cultures in brain-heart infusion broth in concentrations of 1:1000 for gram-positive organisms and 1:10,000 for gram-negative organisms were used for testing by the tube dilution method. Two methods of tube dilution susceptibility testing were used: the "spot-plate" method as described by Beargie *et al*⁵ was used in the early phase of the study and, thereafter, a microtitration technique as described by Chitwood⁶ was employed. This method utilizes a v-shaped microplate with minimal inhibitory concentration (MIC) being read as the first microplate showing no visible cloudiness.

Serum, urine, and cerebrospinal fluid assays were performed chiefly by the Pediatric Pharmacology Unit at Children's Memorial Hospital using the *Sarcina lutea* cup-plate technique. Periodically, for comparison purposes assays on

*Courtesy of Eli Lilly Company

divided specimens were carried out by the Lilly Laboratories for Clinical Research, Indianapolis, using the same technique for comparison purposes. Blood specimens for assay were collected in sterile test tubes and allowed to clot. The clot was removed and the serum was centrifuged, decanted, immediately frozen, and maintained in this state until assayed. Urine and cerebrospinal fluid were collected in sterile containers and also kept in a frozen state.

RESULTS

Susceptibility Patterns: The *in-vitro* susceptibility of 2,635 bacterial isolates to the four compounds was determined by the disc method, and of 1,467 isolates to three derivatives by the tube dilution technique (Tables 1, 2). Of 920 strains of staphylococci tested by the disc method, nearly all were susceptible to all four drugs. The susceptibility of penicillin-G-resistant and penicillin-G-sensitive strains was similar. All strains of pneumococci and streptococci were sensitive to all four drugs. Susceptibility of gram-negative organisms varied. The majority of strains of *Escherichia coli* were susceptible, as were most strains of *Klebsiella*, one-half-to-two-thirds of all *Proteus* species, and most strains of *P. mirabilis*. Nearly all

strains of *Pseudomonas aeruginosa* and about three-fourths of *Enterobacter* strains were resistant (Table 1).

The MIC of three of the compounds required to inhibit various organisms is shown in Table 2. Almost all strains of gram-positive organisms were susceptible to therapeutically achievable serum levels of the three agents, and most were susceptible to extremely low concentrations. Susceptibility of gram-negative organisms varied greatly. There was little difference in susceptibility of *Enterobacter* to the three cephalosporin derivatives, most strains requiring high concentrations for inhibition. *Klebsiella* isolates were considerably more susceptible. Susceptibility of *Proteus* species, except for *P. mirabilis* which was generally quite susceptible, was similar to that of the *Enterobacter* species. Although the MIC for strains of *E. coli* varied greatly, the mode was lower for cephalixin than for cephalothin and cephaloridine. Most strains of *Salmonella* tested were sensitive to low concentrations, while *Shigella* species showed greater variation in susceptibility. All strains of *P. aeruginosa* required very high concentrations for inhibition. *Hemophilus influenzae* strains were more sensitive *in-vitro* to cephalothin than to either cephaloridine or cephalixin. More recently isolated strains of *E. coli*, *Enterobacter*, *Klebsiella*, and *Shigella* in our clinic have proved to be

Table 1: IN-VITRO SUSCEPTIBILITY (30 µg DISC) OF VARIOUS MICROORGANISMS TO FOUR CEPHALOSPORIN DERIVATIVES

ORGANISM	NO. OF STRAINS	CEPHALOTHIN		CEPHALORIDINE		CEPHALOGLYCIN		CEPHALEXIN	
		S*	R*	S	R	S	R	S	R
Staphylococcus, Coagulase-Positive	724								
Penicillinase-Resistant	524	98%	2%	97%	3%	97%	3%	97%	3%
Penicillinase-Susceptible	200	95%	5%	98%	2%	100%	—	100%	—
Staphylococcus, Coagulase-Negative	196	100%	—	100%	—	99%	1%	99%	1%
Group A Streptococcus	120	100%	—	100%	—	100%	—	100%	—
Alpha-Hemolytic Streptococcus	38	100%	—	100%	—	100%	—	100%	—
Diplococcus Pneumoniae	140	100%	—	100%	—	100%	—	100%	—
Escherichia Coli	413	81%	19%	84%	16%	—	—	82%	18%
Enterobacter	96	24%	76%	22%	78%	—	—	20%	80%
Klebsiella	162	86%	14%	88%	12%	—	—	92%	8%
Proteus Species	211	57%	43%	63%	37%	50%	50%	51%	49%
Proteus Mirabilis	64	91%	9%	89%	11%	—	—	76%	24%
Pseudomonas Aeruginosa	233	11%	89%	7%	93%	10%	90%	—	100%
Shigella Species	56	86%	14%	—	—	—	—	80%	20%
Salmonella Species	54	83%	17%	80%	20%	—	—	82%	18%
Hemophilus Influenzae	84	83%	17%	50%	50%	—	—	—	—
Neisseria Meningitidis	32	100%	—	96%	4%	—	—	94%	6%
Alcaligenes	12	64%	36%	70%	30%	60%	40%	61%	39%
Total	2635								

*S=SUSCEPTIBLE

*R=RESISTANT

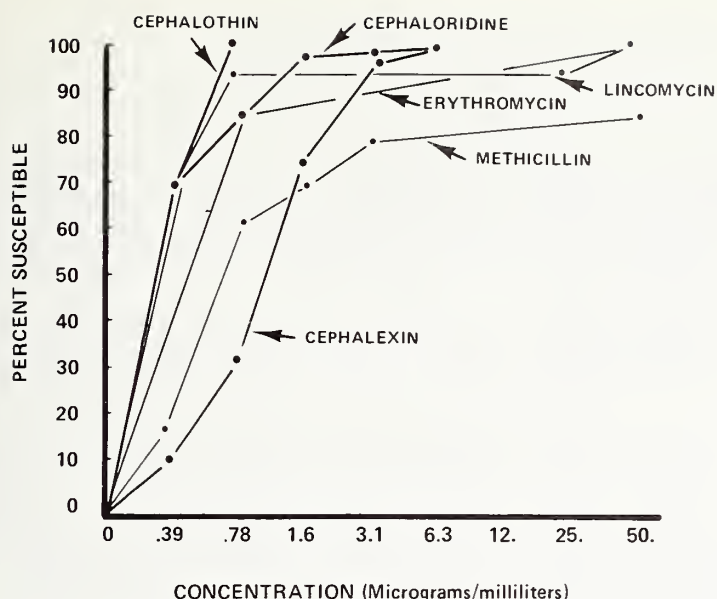


Figure 1—*In-vitro* susceptibility of coagulase-positive penicillin-G-resistant staphylococci (65 strains) from clinical isolates to cephalothin, cephaloridine, cephalixin, methicillin, erythromycin, and lincomycin.

slightly more susceptible to cephaloridine than to cephalothin or cephalixin.⁷

Comparison of activity of cephalothin, cephaloridine, and cephalixin to some other commonly used anti-staphylococcal agents against 65 strains of penicillinase-producing (penicillin-G-resistant) staphylococci is shown in Fig 1. Cephalothin demonstrated slightly greater activity than cephaloridine and considerably more than cephalixin. It also had greater anti-staphylococcal activity than did erythromycin, lincomycin, or methicillin. Cephaloridine was similar in activity to lincomycin and erythromycin, inhibiting 85% to

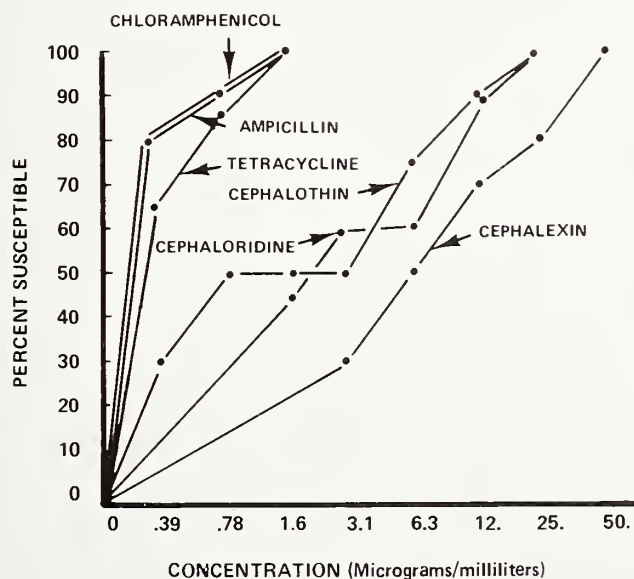


Figure 2:—*In-vitro* susceptibility of *H influenzae* (10 strains) from clinical isolates to three cephalosporins and to chloramphenicol, ampicillin, and tetracycline.

90% of all strains at 0.78 µg/ml concentration. Methicillin inhibited a smaller percentage at this concentration. Cephalixin demonstrated 50% less activity than methicillin at 0.78 µg/ml concentration. The same pattern of susceptibility was found for *Diplococcus pneumoniae*; however, Group A streptococci were equally sensitive to cephalothin and cephaloridine and slightly less sensitive to cephalixin.

The *in-vitro* susceptibility patterns of ten strains of *H influenzae* to three cephalosporins and to chloramphenicol, ampicillin, and tetracycline are compared in Fig 2. Most strains were considerably more susceptible to the latter three agents than to the cephalosporins.

A comparison of the *in-vitro* susceptibility patterns of 31 strains of *E coli* to three cephalosporins and to tetracycline, ampicillin, and kanamycin is shown in Fig 3. Cephaloridine demonstrated greater *in-vitro* activity than kanamycin at the same concentrations but less than tetracycline or ampicillin. Cephalothin and cephalixin were less active, with less than 50% of the strains tested being susceptible at concentrations of 12.0 µg/ml or less. In this clinic in recent years, an increasing number of strains of *E coli* have shown *in-vitro* resistance to kanamycin as well as to ampicillin.^{7, 41}

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TABLE 2: MINIMUM INHIBITORY CONCENTRATIONS ($\mu\text{g/ml}$) OF THREE CEPHALOSPORIN DERIVATIVES FOR VARIOUS ORGANISMS

ORGANISM	NO. OF STRAINS	MIC ($\mu\text{g/ml}$)								
		CEPHALOTHIN			CEPHALORIDINE			CEPHALEXIN		
		MODE	RANGE		MODE	RANGE		MODE	RANGE	
			LOW	HIGH		LOW	HIGH		LOW	HIGH
Staphylococcus, Coagulase-Positive	375									
Penicillinase-Resistant	255	0.4	<0.39	0.78	0.8	<0.39	0.78	1.56	0.39	1.56
Penicillinase-Susceptible	120	0.39	0.2	1.56	0.39	0.2	3.9	1.56	0.39	3.12
Staphylococcus, Coagulase-Negative	196	0.39	<0.39	3.12	0.39	<0.39	3.12	0.78	0.39	3.12
Group A Streptococcus	60	0.78	0.39	0.78	0.8	0.39	0.78	1.56	0.39	1.56
Alpha-Hemolytic Streptococcus	76	0.39	<0.39	3.12	0.39	<0.39	3.12	0.78	0.39	6.25
Diplococcus Pneumoniae	130	0.4	<0.39	0.78	0.8	<0.39	0.78	1.56	0.39	1.56
Escherichia Coli	68	12.5	0.39	>50	6.25	0.39	>50	25	3.12	>50
Enterobacter	35	25.0	12.5	>50	25.0	12.5	>50	25.0	12.5	>50
Klebsiella	90	11	3.9	12.5	13	0.39	25	16	0.39	25
Proteus Species	60	12.5	3.12	25	25	12.5	>50	25	12.5	>50
Proteus Mirabilis	31	12.5	0.39	>50	6.25	3.12	>50	6.25	0.39	50
Pseudomonas Aeruginosa	120		>100			>100			>100	
Shigella Species	56	12.5	1.56	>50	6.25	<0.39	12.5	12.5	3.12	50
Salmonella Species	54	3.12	1.56	25	2.3	<0.39	6.25	4.6	0.78	12.5
Hemophilus Influenzae	84	12.5	<0.39	25	25	12.5	50	25	12.5	>50
Neisseria Meningitidis	32	0.78	<0.39	12.5	1.2	0.39	25.0	3.12	0.39	25
Total	1,467									

Clinical Pharmacology: Mean serum concentrations found in patients receiving various doses of cephalothin are shown in Table 3. No patient had any known disorder which would affect the absorption or excretion of the agent. Although serum levels varied among subjects, satisfactory therapeutic blood levels of the drug were obtained with doses exceeding 20 mg/kg of body weight.

Mean serum concentrations of cephaloridine and cephalixin are shown in Fig 4. Peak concentrations for both agents (7.5 $\mu\text{g/ml}$ for cepha-

loridine and 2.6 $\mu\text{g/ml}$ for cephalixin) occurred 30 minutes after administration. Urinary excretion levels closely paralleled serum concentrations, with the serum/urine ratio averaging 6:4.

Therapeutic Response by Causative Organism: In general, satisfactory results were obtained by cephalosporin treatment in the majority of patients with infections due to gram-positive bacteria, including both penicillinase

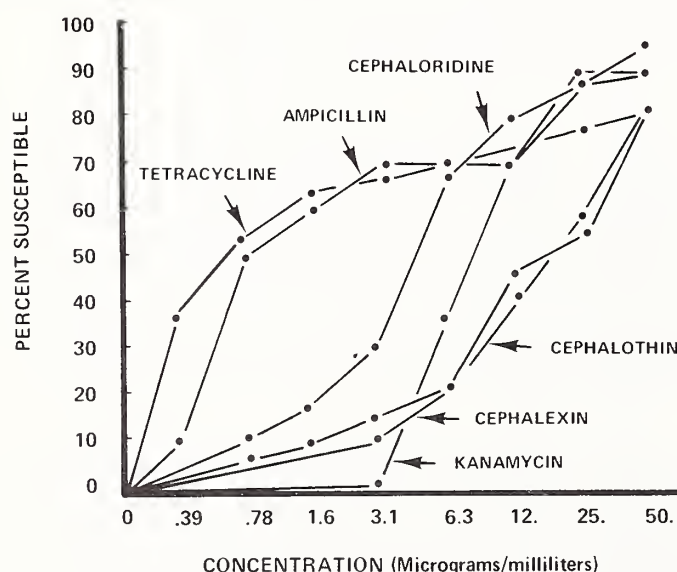


Figure 3:—*In-vitro* susceptibility of *E coli* (31 strains) from clinical isolates to three cephalosporins and to other antibiotics.

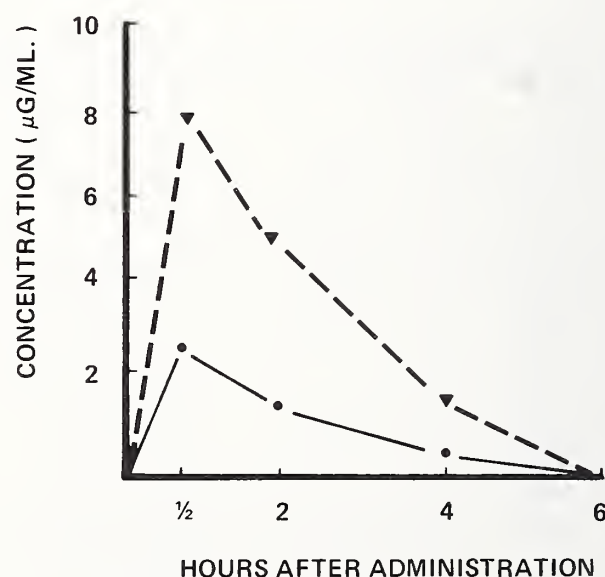


Figure 4:—Mean serum concentrations at various time intervals after a single 50 mg/kg dose of cephaloridine (interrupted line) administered intramuscularly and cephalixin (solid line) administered orally.

TABLE 3: MEAN SERUM CONCENTRATIONS (MCG/ML) OF CEPHALOTHIN ONE-HALF AND TWO HOURS AFTER INTRAMUSCULAR INJECTIONS OF A SINGLE DOSE.

Dose Range (mg/kg)	Mean Serum Concentration*	
	After ½ Hour	After 2 Hours
10-20	4.9 (.86)	0.95 (.05)
20-30	7.05 (.88)	29.93 (1.68)
30-50	3.72 (1.43)	24.33 (1.74)

*Standard error of the mean in parentheses.

and non-penicillinase producing staphylococci, pneumococci, and group A streptococci. Unsatisfactory response was often due to the patients' serious underlying disorders. For example, of the seven patients with septicemia treated with cephalothin, the results were satisfactory in four, but three patients died. However, two of these children had acute leukemia and one had a lymphoma. The cause of death in all three was believed to be due to the primary disease rather than to the bacteremia. Results in patients with gram-negative bacterial infections were not as consistent or as satisfactory as those in patients with gram-positive coccal infections. The therapeutic results in these patients correlated with the *in-vitro* susceptibility of the infecting organism. However, an excellent response was seen in several patients with infections due to a variety of different gram-negative bacilli, with the exception of those infections due to *Ps aeruginosa*.

Toxicity: Side effects and toxicity were minimal with all compounds. Pain at the site of cephalothin injection was frequent, but it was not necessary to discontinue therapy in any of the 113 patients because of discomfort. Nine patients treated with cephalothin developed an elevation of SGOT during therapy; in only five was this thought to be drug-related, and the SGOT levels returned to normal when the drug was discontinued. In no case did clinical jaundice occur. None of the patients showed abnormalities in the hemogram or urinalysis attributable to any of the four therapeutic agents. Of the patients who had serial determinations of BUN and serum alkaline phosphatase, a slight, transient rise in BUN occurred in nine patients with cystic fibrosis after an average of 40.7 days of therapy with cephaloglycin. There was no associated abnormality of the hemogram or urinalysis or of alkaline phosphatase level in any of these patients, and the BUN

values promptly returned to normal when the drug was discontinued. The significance of this finding is not known; abnormalities were not noted in patients receiving cephalothin, cephaloridine, or cephalexin, although a smaller number of patients received these agents for such a prolonged period. One patient receiving cephaloglycin developed nausea and vomiting which disappeared when the drug was discontinued. Two patients developed an urticarial rash during therapy with cephaloridine; however, it was considered drug-related in only one. One patient receiving large doses of cephalothin intravenously developed a positive direct Coombs' reaction without evidence of hemolysis; this returned to normal when the therapy was changed to cephaloridine. Diarrhea attributable to the orally administered preparations was infrequent.

Seventeen patients were treated for infections of the genitourinary tract. All had failed to respond to multiple courses of previous therapy. They ranged in age from birth to 14 years and averaged 6.5 years. The duration of therapy ranged from five to 25 days and average 12.5 days. All had urine colony counts of 100,000 or more organisms per milliliter; the infection was due to gram-negative bacilli in 15 instances. A satisfactory response was observed in 12 (71%). The three who died had an associated congenital defect with obstructive uropathy and uremia. One had a *Proteus* perinephric abscess, one had chronic pyelonephritis due to *Proteus* species.

Patients with a variety of other serious infections were treated. Five children with bacterial parotitis, one with a hepatic abscess of undetermined cause, and three infants with bacterial gastroenteritis responded satisfactorily to one of the four agents. A 2-month-old infant with congenital syphilis responded satisfactorily to a 14-day course of cephaloridine. Only one of the patients whose response was considered unfavorable could be considered a therapeutic failure. This was a newborn infant with erythroblastosis and a liver abscess due to a coagulase-positive staphylococci. Two deaths occurred in this group: one patient had a *Pseudomonas* infection not suspected when therapy was begun, but the causative organism in the other patient could not be isolated.

The group with less serious infections consisted of 62 patients ranging in age from birth to 17 years. The majority had either skin and soft tissue infections, pharyngitis, tonsillitis or re-

TABLE 4:
CLINICAL AND BACTERIOLOGIC DATA AND THERAPEUTIC RESULTS FROM
312 PATIENTS TREATED WITH CEPHALOSPORIN DERIVATIVES*

System and/or Disease	Drug	No. Patients	Organisms										Therapy		Therapeutic Response ¹		
			Staph. Coag.-Resistant Pen.-G.	Staph. Coag.-Sens. Pen.-G.	Pneumococcus	Group A Streptococcus	Non-Group A Streptococcus	Enterobacter Klebsiella	E Coli	Pseudomonas aeruginosa	Other Gram-Negative Bacilli	Undetermined	Average Dose (gm)	Average Duration (Days)	Satisfactory	Indeterminate	Unsatisfactory
SEPTICEMIA ³	Cephalothin	7	1			2		1		1		2	4.7	2.6	3		(4) ²
	Cephaloridine	4				1		1		1	1		9.8	5.2	2	1	(1)
RESPIRATORY																	
Pneumonia	Cephalothin	62	16		2		2		2		1	39	8.4	12.2	49	3	10 ²
	Cephaloridine	97	6		8	3	2	8	7	10	4	49	8.7	8.8	85	6	6 ²
	Cephaloglycin	5										5	6	21.4	3	2	0
	Cephalexin	3				1						2	6.7	9.3	2	1	
Empyema	Cephalothin	3	3										11.8	22	3	0	0
	Cephaloridine	3						1				2	18.0	12.6	2	1	0
Pharyngitis	Cephalothin	1											0.5	1		1	
Tonsillitis	Cephalothin	1										1	3.0	5	1		
	Cephaloglycin	1				1							1.6	1		1	
Otitis Media	Cephalothin	3									1	2	1.9	4.3	3		
	Cephaloridine	1										1	7.5	14	1		
	Cephaloglycin	1										1	8	8	1		
NERVOUS SYSTEM																	
Meningitis	Cephalothin	9	1		1						4	3	6.0	16	4	3	(2)
	Cephaloridine	4	1				1		2				21.2	24	2	1	1
Brain Abscess	Cephalothin	1									1		80	38			(1)
	Cephaloridine	2	1									1	51.6	10		1	(1)
CARDIOVASCULAR																	
Pericarditis	Cephalothin	2	1			1							20.5	15	2		
Endocarditis	Cephaloridine	1	1										17	17	1		
BONE AND JOINT																	
Osteomyelitis	Cephalothin	2	1				1						26.5	17.5	2		
	Cephaloridine	3					1					2	6.1	19.6	1	2	
	Cephalexin	1	1										45	15		1	
Septic Arthritis	Cephalothin	2										2	7.3	8	2		
	Cephaloridine	2										2	7.0	19.5	2		
URINARY																	
Urinary Infection and/or	Cephalothin	8	1					1	2		3	1	15.0	13.6	5	1	(2)
	Cephaloridine	3						1	1		1		12.3	11.6	2		(1)
Pyelonephritis	Cephaloglycin	2						1	1				3.5	19.5	2		
	Cephalexin	4						1	3				8.6	8.5	3	1	
SKIN AND SOFT TISSUE																	
Soft Tissue	Cephalothin	6	3			1						2	6.0	10.8	6		
Infection	Cephaloridine	16	10	2				1	1			2	8.9	7.4	11	4	(1)
	Cephaloglycin	3											5.4	9	3		
	Cephalexin	8	2	4		2							6.8	10.5	8		
MISCELLANEOUS																	
Liver Abscess	Cephalothin	1	1										0.3	15			(1)
	Cephaloridine	1										1	33	11	1		
Mediastinitis	Cephaloridine	2								2			6	7.5		1	(1)
Peritonitis	Cephaloridine	1							1				15	10		1	
Syphilis,	Cephaloridine	1											8.4	14	1		
Congenital																	
Cryptococcosis, Disseminated	Cephaloridine	1											6	5			(1)
Parotitis,																	
Bacterial	Cephaloridine	1		1									12	4	1		
	Cephaloglycin	2	1									1	6	9	2		
	Cephalexin	2					1					1	15	18.5	2		
Mastoiditis	Cephaloglycin	1										1	1	3		1	
Gastroenteritis	Cephalothin	1										1	1.4	6	1		
	Cephaloridine	2									2		3.9	5	2		
PROPHYLAXIS																	
Cystic Fibrosis	Cephalothin	3										3	5.7	9.0	3		
	Cephaloridine	7										7	11.7	8.0	7		
Heart Disease ⁴		11										11	11.9	40.7	11		
FEVER OF UNDETERMINED ORIGIN	Cephalothin	1										1	1.2	3	1		
	Cephaloridine	2										2	20.5	18.5		2	
	Cephaloglycin	1										1	17	26		1	

1. Based on culture results and clinical response

2. () represents death. There were 9 deaths in patients with pneumonia (6, cephalothin; 3, cephaloridine).

3. Includes only patients with primary bacteremia and not those with bacteremia plus another clinically definable entity, ie, pneumonia and septicemia.

4. For prevention of endocarditis.

*Modified from Riley⁴

ceived one of the four drugs for prophylactic purposes (21 patients). Twenty-eight had infections due to gram-positive organisms (Table 4). Of these, 21 had infections due to *Staphylococcus aureus*; 15 strains were penicillin-G-resistant and the remainder were sensitive to penicillin G when tested by tube dilution methods. All patients with the less serious infections due to gram-positive bacteria responded promptly and satisfactorily to treatment. Nineteen infections were due to gram-negative organisms, including *Enterobacter*, *E. coli*, *Shigella*, and *H. influenzae*. The majority of patients with infections due to these organisms responded satisfactorily. The only death in this group was a 6-year-old girl with a pinealoma and a postoperative wound infection who died from the primary disease shortly after cephaloridine therapy was initiated.

Cephalosporins were administered for prophylactic purposes to 21 patients with heart or chronic pulmonary disease. The results were considered satisfactory; none of the patients developed evidence of infection during administration. Eleven patients with heart disease received an average of 40.7 days of continuous therapy with cephaloglycin with no adverse affect except for a slight, transient elevation of the BUN in nine. Four other patients with fever of undetermined origin, had no untoward reactions to the drug used.

Of the total 312 patients, response was satisfactory in 243 (78%) and unsatisfactory in 31 (10%). Of the 237 patients considered to have serious infections, response was satisfactory in 179 (76%), unsatisfactory in 32 (14%), and indeterminate in 26 (11%). Results were considered satisfactory in virtually all patients with less severe infections but, of course, results in such patients are not nearly as meaningful.

Clinical Results: Clinical and bacteriologic data and therapeutic response in the 312 patients treated with the four cephalosporins over a several-year period are summarized in Table 4. Of the total group, 113 were treated with cephalothin, 154 with cephaloridine, 27 with cephaloglycin, and 18 with cephalixin. A total of 237 patients were considered to have serious infections. Of these, 35% had serious underlying disorders of either congenital or acquired origin. Most of the indeterminate clinical responses occurred in patients in whom the effects of the cephalosporin could not be evaluated because of prior or concomitant therapy with other agents.

Of 11 cases of septicemia, four were due to gram-positive and five to gram-negative organisms. Drug doses varied from 3.0 to 13 gm and averaged 6.6 gm. Five responded satisfactorily. The response of one patient with multiple congenital defects was considered indeterminate because of probable reinfection. Five patients died while on therapy: one had a ruptured meningomyelocele; two had *Pseudomonas* septicemia, not suspected when therapy was begun; one had an associated severe protein-losing enteropathy; and one had uncontrolled thyrotoxicosis.

Of the 181 patients with respiratory disease, 167 had pneumonia. Seventy-five of the 167 patients had serious underlying congenital or metabolic disorders. Eleven were neonates; 54 were between one and six months of age. Average age was 20.4 months; however, 55% of the patients were less than 12 months of age. Duration of therapy ranged from 5 to 25 days, and averaged 10.5 days. Causative organisms were isolated in 72 (43%) of the patients; of these, 40 were gram-positive bacteria. In these 72 patients, the pneumonia was due to penicillinase-producing staphylococci in 22, to pneumococci in 10, to streptococci in eight, and to a variety of gram-negative bacteria in 32. In several patients in whom the bacteriologic etiology is listed as "undetermined," there was roentgenographic evidence of staphylococcal pneumonia but, as is frequently the case in children, no causative organism was recovered. Response was satisfactory in 83% of the patients with pneumonia. Of the 12 patients whose response was classified as indeterminate, seven received concomitant therapy with other agents. The response in those receiving combined therapy almost always was favorable. Thus, the overall satisfactory therapeutic response was 90% in patients with pneumonia receiving cephalosporin derivatives either alone or with other therapy. Nine of these patients died while on therapy. Of these, three had advanced cystic fibrosis, complicated in two by *Pseudomonas* infections; two, irreparable congenital anomalies; one, a concurrent *Enterobacter* urinary tract infection; and, one, overwhelming nocardiosis.

In children with staphylococcal empyema, all three treated with cephalothin and two of the three treated with cephaloridine exhibited a satisfactory response.

Thirteen patients with meningitis were treated, nine with cephalothin and four with

cephaloridine. Five of the 13 had an open meningocele, one had bilateral megaloureters, two had obstructive hydrocephalus, and one had multiple ectodermal defects. Of the six who responded satisfactorily, four had infections with staphylococci, streptococci, or pneumococci, and two had purulent meningitis of undetermined cause. The two deaths occurred in patients whose infections were due to *H influenzae* in one case and *Proteus* species in another. An infant with meningitis due to *E coli* failed to respond. All patients who died, failed to respond to treatment, or had an indeterminate response, had complications such as anatomic clinical defects and high spinal fluid protein which unfavorably influenced delivery of the drug to the site of infection.

The response of three children with brain abscesses was unsatisfactory.

Two children with purulent pericarditis responded satisfactorily to cephalothin, and one with staphylococcal endocarditis responded dramatically to cephaloridine.

Of the four patients with septic arthritis and six with osteomyelitis, satisfactory response was noted in seven of the ten — all four of those receiving cephalothin and three of the five receiving cephaloridine. Three of the patients had failed to respond to a variety of antibiotics previously.

DISCUSSION

The cephalosporins exhibit bactericidal activity against the most frequently encountered gram-positive and many gram-negative bacteria.^{2,4} Whereas some penicillin antibiotics, such as penicillin-G, penicillin-V, and ampicillin, are rapidly inactivated by bacterial lactamases (especially staphylococcal lactamases and those from the enterobacteriaceae), most of the cephalosporins resist this hydrolytic destruction by enzymes from organisms such as *S aureus*. However, the cephalosporins are inactivated by lactamases elaborated by strains of certain gram-negative bacilli, such as *Pseudomonas* and *Enterobacter*. Recent studies of the B-lactamases produced by gram-negative bacteria have indicated that the ones produced by *E coli*, *Proteus*, and *Klebsiella* hydrolyze both benzyl penicillin and cephalosporin congeners. Hamilton-Miller *et al*¹² have suggested that the enzymes elaborated by *E coli* and *Proteus* have a greater affinity for the

cephalosporin derivatives than for penicillin. The opposite appears to be the case with *Klebsiella*. The growth of *Enterobacter cloacae*, *E aerogenes*, and *P morgagni* may be inhibited by some cephalosporin and penicillin congeners.³

Virtually all 1,168 strains of staphylococci (both penicillin-G-resistant and susceptible strains), pneumococci, meningococci, and group A streptococci studied were quite susceptible to the cephalosporins studied. They exhibited very low MIC and were killed by concentrations easily attainable in the body. Penicillin-G-resistant staphylococci were, in general, more susceptible to cephalothin and cephaloridine than to cephalixin, based on the results of *in-vitro* tube dilution studies. Methicillin-resistant strains of staphylococci are cross-resistant with cephalixin but not with cephalothin and cephaloridine, and the latter two agents are superior to other antibiotics against such strains. *In-vitro* studies comparing commonly used antistaphylococcal agents demonstrated that the cephalosporins have a high degree of activity against penicillin-G-resistant strains of staphylococci.

The susceptibility of the gram-negative organisms studied was quite variable. The majority of strains of *E coli* and *Klebsiella* were susceptible, while *Enterobacter*, *Proteus* species (other than *P mirabilis*), and enterococci were generally resistant. Certain strains of *E coli* resistant to ampicillin required rather large concentrations of cephalothin, cephaloridine, and cephaloglycin for inhibition. Most were inhibited by cephalixin. Cephalothin is useful in differentiating *Klebsiella* species from *Enterobacter* species: the former are highly resistant. Although the concentration of the drug required for inhibition varied greatly, about three-fourths of the strains of *Shigella*, *Salmonella*, and *H influenzae* from our clinic were susceptible to cephalothin, cephaloridine, and cephalixin. Cephaloridine was slightly more active against *E coli* than was cephalothin or cephalixin. *Ps aeruginosa*, *Herellea*, *Bacterioides*, *Serratia*, *Providencia*, group D streptococci, and fungi (with the exception of some strains of *Actinomyces*) are unaffected by the cephalosporins. Cephalixin is approximately one-fourth to one-thirtieth as effective as cephaloridine against most susceptible organisms.³ The *in-vitro* susceptibility of bacteria to cephalixin is markedly altered by onoculum size.^{3,4} Cephaloridine does not ap-

pear to be as resistant to penicillinase as cephalosporin C, cephalothin, cloxacillin, or methicillin.³ In general, a similar pattern of susceptibility of gram-negative organisms has been observed by other investigators who have compared these aspects of the four agents.^{3, 11-15} The activity of cephaloglycin is substantially less than that of cephalothin against *Strep viridans*, pneumococci, *Salmonella*, *Klebsiella*, and *S aureus*.

The mechanism of action of cephalosporin C and its derivatives appears to be qualitatively similar to that of penicillin. Cell-wall synthesis is inhibited, resulting in accumulation of nucleotides containing uridine-5-pyrophosphate and the N-acetyl derivatives of 3-(α -carboxymethyl-D-glucosamine) (muramic acid). The incorporation of carbon-14 lysine into mucopeptide is reduced. Susceptible bacteria after exposure to cephalothin are converted into long filaments and large bodies similar to the protoplasts produced by penicillin. The sensitivity of the organism to the drug and the degree of morphological abnormality are directly related.³

Studies of the clinical pharmacology of the four cephalosporin derivatives were carried out in this study. Cephalothin is not acid-stable, so it cannot be administered orally. It is well absorbed after intramuscular injection, giving peak concentrations that are bactericidal to many organisms within 30 minutes and is freely distributed in the tissues, including amniotic fluid, fetal blood, peritoneal fluid, aqueous humor, milk, and pleural and synovial fluid. It is found in low concentrations in the cerebrospinal fluid of normal individuals but, in the presence of meningeal inflammation, does penetrate the blood-brain barrier, but in concentrations somewhat less than 50% of that in the serum. Like the penicillins, the drug is excreted rapidly in the urine (60%-90% within the first six hours). Cephalothin also can be administered intravenously, either intermittently or as a continuous infusion. Intravenous administration, as well as instillation into joint, pleural, and peritoneal fluids, is well tolerated. Approximately 60% is bound by serum proteins.⁴

Therapeutic serum levels of cephalothin were obtained with an intramuscular dose of 10 mg/kg/day given in four divided doses. Increasing the dose to 25 mg/kg/day resulted in excellent levels, which were well maintained. In meningitis, the drug diffuses into the cere-

brospinal fluid but at relatively low concentrations.⁹ The levels were significantly higher in both premature and full-term newborn infants than in a group of older infants and in a group of children. The serum concentration obtained at two hours after a single dose is considerably higher in newborn premature infants than in older premature infants; similar results were found in newborn full-term infants compared to older full-term infants. Following a single dose of 12.5 mg/kg, detectable levels were present in the serum for 12 hours or longer, whereas no concentration could be detected after 12 hours in full-term newborns one to three days of age. In older infants and in children, no drug was detectable six hours after administration and there was no accumulation after multiple doses. Cephalothin is readily and promptly transferred across the placenta to the fetus when administered to mothers immediately before delivery, the level in cord blood being one-fourth or one-half that in maternal blood. Following transplacental transfer, peak serum levels of cephalothin occur in about 15 minutes, but the maximum level achieved in the infants was only 5 μ g/ml. This is in contrast to reported plasma levels as high as 93 μ g/ml after single doses given directly to newborns.⁸⁻¹⁰ No evidence of acute drug toxicity in the neonate following transplacental passage has been noted.⁴

In pharmacologic behavior and absence of toxicity in animals, cephaloridine is quite similar to cephalothin. However, there are certain significant differences. It is a betaine and therefore does not require either sodium or potassium to form a salt. This characteristic is of clinical importance in the treatment of patients who require large doses of an antimicrobial agent but in whom sodium or potassium is deleterious. Cephaloridine is rapidly absorbed after intramuscular and intravenous injection and is widely distributed through the body tissues, although it penetrates poorly into the cerebrospinal fluid in normal individuals. It readily passes the placenta into fetal circulation and is excreted in breast milk. Cephaloridine is not bound significantly to protein. Maximum concentration is reached in the blood 15-30 minutes following injection. It has a longer serum half-life than cephalothin, permitting reduction in the frequency of injections. Like cephalothin, it is not acid-stable and therefore is not absorbed when given by mouth. Renal excretion is rapid, accounting for 50-80%

of an injected dose, but the fate of the unexcreted portion is uncertain. There appears to be little metabolism of cephaloridine, and the unchanged drug is excreted by glomerular filtration and tubular secretion. Tubular secretion is less active than with cephalothin, apparently accounting for the prolonged high concentration of cephaloridine observed in blood and extracellular fluids. Probenecid will antagonize tubular secretion. Cephaloridine has produced renal tubular necrosis in several animal species, and this nephrotoxicity must be considered in undertaking treatment of human patients, especially those with renal impairment. A small amount can be detected in the livers of treated rats, but there is no other cumulative trend and no active metabolites can be detected in the urine or tissues. It results in high urinary levels, but the renal excretion is slower than that of cephalothin.⁴

The absorption and excretion of cephaloridine in infants and children have been studied in our clinic. After intramuscular administration, peak concentrations were present in the serum in 15-30 minutes. No detectable activity was present in the serum eight hours after administration of an intramuscular dose of 50 mg/kg/day in two divided doses; increasing the dose to 100 mg/kg/day and to 200 mg/kg/day, respectively, resulted in significant levels after eight hours. Fujii¹⁶ reported that following a single intramuscular injection of cephalothin or cephaloridine in a dose of 10 mg/kg in four healthy children, the peak level was reached in one-half hour, and levels of cephaloridine were consistently higher and more prolonged than those of cephalothin. He also reported that in eight infants and children given cephaloridine intramuscularly in a dose of 33 mg/kg every eight hours (100 mg/kg/day), the blood level peak averaged 26.5 μ g/ml and an average of 0.8 μ g/ml was assayable before the next injection. Azimi and Cramblett¹⁷ obtained therapeutic blood levels in a series of infants and children with a dosage of 20-25 mg/kg administered intramuscularly or intravenously every six hours. Cephaloridine has been shown to regularly pass the placenta and, following administration in the mother one-to-12-hours before delivery, serum levels in the infant do not decline until after eight hours. Burland and Simpson¹⁸ administered cephaloridine in a dose of 30 mg/kg/24 hours intramuscularly at

12-hour intervals to 75 newborn infants for therapeutic or prophylactic reasons. Serum levels were consistently higher and more prolonged than those in adults following a 1-gm dose. Urinary excretion in the infants was substantially less than in adults. There was no chemical or clinical evidence of toxicity. This same dose given daily to newborn infants intramuscularly produced satisfactory therapeutic serum levels.

Absorption and excretion studies of cephaloglycin have shown that with oral administration in doses of 15 mg/kg, average peak serum levels of two μ g/ml are reached after two hours, and detectable serum levels remain for up to six hours. The drug is cleared by glomerular filtration and excreted in the urine primarily as the active metabolite desacetycephaloglycin. Urine concentrations of 250-400 μ g/ml are achieved with oral doses of 15 mg/kg. About 35% of a dose is excreted in the urine over a 24-hour period. The highest drug concentrations are present in the urine during the first eight hours after administration of a single dose of 500 mg. Although probenecid prolongs the duration of cephaloglycin activity in the circulation, it does not significantly increase the concentration of the drug in the serum. Although blood levels with this agent are low, concentrations of active drug are present in the urine at levels greater than the MIC of most common urinary pathogens.⁴ Because of low blood levels, the drug probably should not be given to patients with suspected bacteremia or with infections localized outside the urinary tract. Some investigators^{25, 26} have described a tendency for relapse following therapy for urinary tract infections.

Blood level and urine excretion patterns of cephalixin indicate that it is almost completely absorbed after oral administration. The blood levels obtained following oral administration are almost double those obtained with equal doses of cephalothin given intramuscularly. The protein binding of cephalixin in human serum is less than 10% in concentrations above one mg/ml. Ninety-six percent of cephalixin is excreted in the urine. Cephalixin is excreted almost completely within eight hours; 96% of the drug is excreted in the urine as unchanged compound. There is no evidence of renal irritation or depression of renal function. During the first two or three months of life, administration of cephalixin can be limited to a twice-a-day

schedule because of the delayed excretion secondary to renal immaturity.^{4, 19, 20}

In this study, all cephalosporin derivatives were effective *in vivo* against both penicillinase and non-penicillinase-producing strains of staphylococci in many serious and minor infections. In a number of these, a satisfactory response was obtained after other anti-staphylococci agents had failed. Although it did not seem to affect clinical response in this study, there was an *in-vitro* difference in anti-staphylococcal activity among the derivatives (Fig. 1). *In-vitro* cephaloridine activity is affected by the inoculum size of staphylococci, indicating a greater destruction by staphylococcal penicillinase.^{21, 22} The oral derivatives, cephaloglycin and cephalixin, are comparable in activity against penicillinase-producing staphylococci but are less active than either cephalothin or cephaloridine.^{23, 24} No clinically important difference exists in the comparable activity of the four agents against the commonly encountered gram-negative organisms.

Cephaloglycin has been found less desirable than cephalixin by other workers³ because of gastrointestinal symptoms, including severe diarrhea. This untoward effect was not observed in the 27 patients treated with cephaloglycin in our series.

Of 18 patients treated with cephalixin in this series, there were no failures and 15 patients had an excellent clinical response. There was no evidence of renal or hepatic dysfunction or other toxicity attributable to the drug. These findings confirm those of other investigators²⁷ and extend the conclusions to children.

The paucity of untoward reactions in this study is striking. Because of their simple di- or tripeptide structure and high specific activity, the cephalosporins are, in general, well tolerated. It was not ever necessary to discontinue therapy with cephalothin due to discomfort at the site of intramuscular injections. Phlebitis of sufficient severity to necessitate terminating therapy did not occur in any patient receiving either cephalothin or cephaloridine intravenously; neither were any drug-related blood dyscrasias^{28, 29} or overt renal disorders³⁰ noted. The transaminase elevation in nine patients receiving cephaloglycin could have been drug-related. Sabath *et al*³¹ have described false elevations of serum transaminase associated with administration of erythromycin estolate unasociated with hepatic dysfunction. The eleva-

tions were shown to be due not to the enzyme, but to an unidentified trypsin-stable substance related to the administration of the antibiotic. In the patients in our study receiving cephaloglycin, transaminase levels promptly returned to normal upon discontinuance of the drug and there was no other laboratory or clinical evidence of hepatocellular damage. This suggests the possibility that a similar phenomenon may be influenced by the cephalosporin C derivatives. Nephrotoxicity has been reported following large doses of cephaloridine.^{30, 32} Recent studies have disclosed a tendency for the cephalosporins to polymerize, and there is evidence that macromolecules and polymers thus formed during biosynthesis or after dosage may constitute allergenic and nephrotoxic complexes.³⁷ Although we administered comparatively high doses for prolonged periods to several patients, evidence of significant nephrotoxicity attributable to cephaloridine was not observed in any of the 153 patients who received this drug. Other aspects of the renal dysfunction associated with the cephalosporins have been reviewed by Weinstein and Kaplan³ and by Riley.⁴

Although there was, at first, optimism that the new penicillins might not cross-react with penicillin-G, experience indicates that cross-reactivity is essentially complete and these agents have approximately the same sensitizing potential as does benzyl penicillin. There is both experimental and clinical evidence of cross-allergenicity between the penicillins and the cephalosporin derivatives.^{4, 33, 34, 35} Immunochemically, this is understandable because of the similarity in the penicilloryl- and cephalosporyl-haptenes and also because of similarities in the chemical structure of macromolecular complexes and polymers formed by derivatives of 6-APA and 7-ACA.³⁷ Several patients in this study with a history of hypersensitivity to penicillins received a cephalosporin uneventfully. Only two patients developed skin rashes considered to be drug-related. According to Benner,³⁸ anaphylaxis to a cephalosporin has been reported only once and no penicillin-sensitive patients who have been treated with a cephalosporin as an alternative have had a fatal reaction. For practical purposes, cephalosporins can be used as replacements for penicillin in allergic subjects, but only with caution. The cephalosporin derivatives may induce primary allergic reactions of several types in about 5% of treated patients.^{3, 4}

Although the cephalosporins, like other broad-spectrum antibiotics, are capable of provoking super-infection by refractory organisms, this was not a significant problem in this study.

Positive direct Coombs' tests have been reported with cephalothin.³⁴ None of the newborn infants developed hyperbilirubinemia or other undesirable reactions. One child developed a positive direct Coombs' while receiving cephalothin (300 mg/kg/day), but the reaction cleared when the therapy was changed to cephaloridine. Experimental work in man and monkeys has failed to determine the ultimate significance of Coombs' reactivity caused by either cephalothin or cephaloridine. Such studies have failed to show any damaging effect to the erythrocyte membrane and biochemical integrity of the red blood cell. In other studies, the incidence of positive Coombs' test associated with large doses of cephalothin was no greater than that occurring in patients treated with penicillin-G.³⁸

This study indicates that cephalothin and cephaloridine are valuable agents in the treatment of a variety of infections in infants and children. They are particularly useful against penicillin-G resistant staphylococci and other gram-positive organisms, and also may be effective in certain gram-negative infections depending on the causative organism. Cephaloglycin, because of low blood levels, instability, and unpredictable absorption, should not be used to treat serious infections. Cephalixin, however, is almost completely absorbed after oral administration, is quite stable, produces excellent blood levels, is therapeutically effective, and appears to be a useful, new antibiotic for oral administration.

Therapeutic activity, as Stewart *et al*³⁷ have pointed out, is always the new product of several variables — intrinsic bacteriostatic action, bactericidal power, pharmacologic efficiency, convenience of dosage, and toxicity. On this basis, the cephalosporins have fields of superiority, equivalence, and inferiority to each other and to other antibiotics. Two recent symposia^{39, 40} on the cephalosporins provide the detailed results of experience of investigators from several different countries and provide further confirmation that the introduction of the cephalosporin group of antibiotics has been a major therapeutic advance. □

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Effort-Induced Sudden Death

Case Report

S. S. SANBAR, MD, PhD

Exertion per se may induce or precipitate death under certain circumstances and it should be recognized as the causative factor of death.

The purpose of this paper is to present the case of a 37-year-old male who suddenly collapsed and died while playing tennis and to attempt to review pertinent medical literature dealing with the subject of sudden death induced by strenuous exercise.

CASE REPORT

The deceased was a 37-year-old Caucasian male. His height was 5'11" and he weighed approximately 170 pounds. Prior to August 14, 1976, the date of sudden death, he had not experienced any symptoms of cardiovascular disease. Specifically, according to the wife of the decedent, he never complained of any discom-

fort or pain in the chest, dyspnea or other symptoms related to coronary artery disease or any other type of cardiac disorder. Nor did he complain of dyspepsia or other gastrointestinal symptoms. His past medical history revealed that in the two years immediately preceding death, he had a vasectomy in January of 1975, and in approximately April of 1975 he was treated for a streptococcal throat infection. In May, 1975, his serum lipids were analyzed during a survey at the Oklahoma Medical Research Foundation. His serum cholesterol was 228 mg percent and serum triglycerides were 112 mg percent, both being in the normal range. As noted above, the decedent was not obese, nor did he have a history of hypertension or diabetes. In fact, he had never complained of any symptoms indicative of cardiovascular disease, and to the best knowledge and belief of his wife and those individuals who were acquainted with him, he was in excellent health.

On August 14, 1976, the decedent played tennis in mid-afternoon in a very strenuous manner with three friends on an outdoor tennis court. They played for a period in excess of an hour. The maximum temperature on that day as noted by Will Rogers Airport National Weather Service forecast office was 100°F with an average on that day of 85°F. At approxi-

From the High Blood Pressure, Hyperlipidemia and Cardiovascular Clinic, 1509 North Rockwell, Oklahoma City, Okla. 73127.

mately 4:30 PM, while playing tennis the deceased fell to the court landing on his back. He was observed by his friends to immediately become rigid and started to become cyanotic. Immediately prior to collapse, the decedent did not complain of chest pain or shortness of breath to his fellow tennis players, nor had any of the individuals with him observed anything unusual during the time they were playing tennis with him. He was taken by ambulance to an Oklahoma City hospital where he was pronounced dead on arrival at the emergency room. The time that the decedent collapsed according to the medical examiner's report was 4:45 PM on 8-14-76. He was pronounced dead on arrival at the emergency room at 5:20 PM.

The body was viewed by the medical examiner the following day, 8-15-76, at 10:50 AM at which time the autopsy revealed the following abnormal findings:

1) The liver was enlarged weighing 2,275 grams and was markedly hyperemic,

2) The spleen was also enlarged weighing 345 grams and hyperemic,

3) The lungs had a combined weight of 1775 grams. The tracheo-bronchial tree contained mild amounts of sero-sanguineous fluid. The lungs were somewhat mottled, purplish with posterior lividity and some scattered segments were collapsed and airless. The sectioned surfaces exuded moderate amounts of bloody, frothy fluid.

4) The heart weighed 420 grams. There was evidence of occlusive, atherosclerotic coronary artery disease with involvement of the small branches as well as the large branches. There were coronary artery occlusions of 40 to 50 per cent, except for a microscopic lumen (*not* complete occlusion) of the left anterior ascending branch of the left coronary artery in its proximal one-third portion. The myocardium was somewhat mottled. There was an area of approximately two centimeters in its greatest dimension in the posterior septum which was quite pale, suggesting an acute myocardial infarction less than six hours old.

DISCUSSION

The discussion of this case will attempt to determine what role if any did the strenuous exercise play in "causing" or "precipitating" the sudden death of the 37-year-old man on the tennis court.

The American Heart Association Monograph Number 47, published in December, 1975, is entitled, "Sudden Coronary Death Outside Hospital," and comprises in 280 pages about 40 articles by experts in this field who presented their work and views at a Symposium held in Minneapolis, Minnesota, October 10-12, 1974.¹ Some of the data reported are discussed below.

"SUDDEN DEATH" is a term used generally to categorize apparently well persons who expectedly or unexpectedly suddenly collapse and expire within a period of one hour, usually in a matter of minutes, according to Kannel *et al* (1975)² or within 24 hours, according to Paul and Shatz (1971)³.

(1) *Mortality Rates and Life Expectancy:*

Kuller, Perper and Cooper (1975)⁴ noted in their Baltimore City Sudden Death Study that the death rates attributable to atherosclerotic heart disease, 1970 to 1972, in Caucasian males, aged 45 to 54 years is 316 in 100,000 per year, *ie* 0.316 percent.

In a report from a cooperative study performed under the sponsorship of the Council on Epidemiology of the American Heart Association, Paul (1971)⁵ published that in normotensive individuals, aged 30 to 39 years, the deaths from *ALL* causes, including sudden death, were 400 per 100,000 per year, *ie* 0.4 percent.

In 1970, the Inter-Society Commission for Heart Disease Resources reported the results of a National Cooperative Pooling Project in US white males aged 30 to 59 years at entry in the study.⁶ In normotensive males, sudden death was found to occur in 130 per 100,000 per year, *ie* 0.13 percent.

The average life expectancy of a white male as of 1970 is over 70 years, according to the National Center for Health Statistics.⁷

Therefore, if one takes into consideration the above mortality rates and average life expectancy of Caucasian males, one would surmise that the decedent, who died at age 37 years had an overall chance of better than 99.6 percent of remaining alive at that age, and to expect possibly over 30 years of additional living.

(2) *Sudden Death and Atherosclerotic Coronary Artery Disease:*

Schwartz and Gerrity (1975)⁸ reported that approximately one-third of persons dying suddenly exhibit thrombi which occlude the coronary arterial system. Their findings are generally in keeping with the frequency of thrombotic occlusion in sudden death reported by 13 other authors, listed in Table 2 of the article by

Schwartz and Gerrity.⁸ The latter authors suggest that mechanisms other than simply lack of blood supply to the myocardium can be instrumental in the development of sudden death, including aggregation of platelets in the circulation; disturbance in the electrical conduction system of the heart; injury to the myocardium by hormones, drugs and inflammation; and abnormal metabolism with changes at a sub-cellular and membrane level.

It is well-established that cardiac arrhythmias, most often fibrillation and infrequently asystole or cardiac standstill result in sudden death as noted by Doyle (1975)⁹ and Lown, Calvert, Armington and Ryan (1975).¹⁰

(3) *Strenuous Exercise and Sudden Death:*

Moses (1963)¹¹ pointed out that the causal relationship between strenuous physical exertion, coronary artery disease and sudden death is riddled and involved in semantics. Physicians in general think and conceive of "cause" as "the cause." On the other hand, laymen and more importantly, the legal mind is more apt to accept "a cause" or "precipitating or aggravating cause" under the definition of causal relationship. Moses stated further that it is very simple to comprehend the idea of an *intervening factor*, which occurred immediately prior to the sudden death from a pre-existing coronary artery disease, as the immediate, precipitating and aggravating cause.

The controversy as to whether there is a recognized entity of "effort-(strenuous exertion)-induced death" has gradually been fading away; there is currently a realization and acceptance of "effort or exercise-induced death." This statement is supported by the following reports from the medical literature:

(a) In 1953, Richardson¹² reviewed the history antecedent to 100 attacks of coronary thrombosis in 96 patients. He found that in only three of 100 attacks was the patient engaged in unusual exertion when the attack occurred and generally all attacks were divided between the working and leisure hours.

(b) In 1960, Masters¹³ studied 2,600 cases with proven coronary occlusion using a questionnaire method, and he concluded that the results did *not* show that occupation, exertion or state of inactivity played any role in precipitating the acute occlusive episode.

(c) In contrast, a 1954 study by Kapp entitled, "Trauma in Relation to Coronary Thrombosis: A Clinical Study of 42 Cases of Coronary Thrombosis Following Trauma or Unusual Effort"¹⁴ demonstrated that in all 42 cases the relationship of trauma or unusual effort to coronary thrombosis was sufficiently high "to warrant consideration of trauma as an important factor in the causation of coronary thrombosis or myocardial infarction in appropriate cases."

(d) In 1961, Patterson¹⁵ noted that there is indeed a division of opinion existing even within the medical profession as to whether physical exertion is a cause or a precipitating or aggravating cause of coronary thrombosis and myocardial infarction. Indeed, the sharpest issue with this concept was provided by the work of Patterson himself which firmly *supported* the role of strong, acute physical exertion on precipitating rupture of vasa vasorum and triggering the onset of arterial thrombosis. It is this causal relationship of atherosclerotic coronary occlusion to physical strain which has come to assume medico-legal importance, particularly in connection with insurance and workman's compensation. In 1966, Friedberg¹⁶ stated:

As a rule, awards are made on the basis that an unusual strain, variously defined in a legal sense in different states, by aggravation of a pre-existing disease constitutes a compensable accidental injury.

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Doctor Sanbar is a senior at Oklahoma City University School of Law and a member of the American Society of Law and Medicine, Phi Delta Phi Legal Fraternity and student member of the Oklahoma Bar Association and the American Bar Association.

He stated further:

Certain difficulties for the physician lie in differences in the definition of terms, such as cause and unusual strain, as between physician and lawyer, and a lack of realization of the basis on which compensation is awarded. The physician thinks of cause as the etiologic factors responsible for the disease. The lawyer regards as causal any environmental factor which contributes in any appreciable degree to heart disease, heart failure, coronary insufficiency or hypertension, or which aggravates the disease process in the sense of an accidental injury for which there is a legal liability.

(e) As far back as 1939, Patterson¹⁷ and Boas¹⁸ noted that in some cases the sequence of events after a severe and unusual physical strain strongly suggest that the strain in some way initiated or accelerated the coronary artery occlusion and the subsequent myocardial infarction. Patterson¹⁷ and Boas¹⁸ indicated that there is no doubt that the fundamental cause of the occlusion in these cases is atherosclerosis, but the *unusual effort* is believed to *precipitate* the occlusion either by causing intimal hemorrhage in the atherosclerotic plaque or by some other undetermined mechanism. Parenthetically, it is worthwhile noting that in actual medical-legal practice, the physician is queried much less about the pathology, symptomatology or natural force of the pre-existing disease than about the role of some physical strain or "accident" introducing angina pectoris, coronary occlusion, myocardial infarction, a disabling arrhythmia, heart failure or unexpected death. Submitted, the answer to this latter question is sometimes determined by personal estimates of probability and reasonableness with emphasis on a post-hoc proctor-hoc type of logic, especially if the physician is called upon to give his answer in a yes or no form to an hypothetical question when neither the question nor the answer fully encompass a just consideration of all the facts and all the gaps in our medical knowledge.

(f) More recent studies by McHenry and co-workers (1976),¹⁹ Farris and co-workers (1976)²⁰ and Jelinek and Lown (1974)²¹ have conclusively demonstrated that exercise induces potentially life-threatening ventricular arrhythmias in a significant number of individuals both with normal and abnormal coronary arteries as determined by arteriography; patients with atherosclerotic coronary artery disease had a significantly higher incidence of exercise-

induced ventricular arrhythmias than those with normal coronary arteries.

(g) The most convincing report connecting sudden death and sport is that of Opie (1975)²² in which he reported 21 sudden deaths in sportsmen, 18 of whom were thought to have had heart attacks either during or after engaging in sports. Seven of the sportsmen were playing rugby football and ranged in age from 17 to 33 years; four were refereeing, two were playing soccer (association football), one golfing, one mountaineering, two were playing tennis, one was jogging and one yachting. Opie²² stated that:

1. Ventricular fibrillation and severe exertion are associated in maximum-effort testing . . . The risk of precipitation of ventricular fibrillation could be as high as 2 episodes per 1000 hours of physical activity in a population predisposed to coronary attacks.

2. In several studies of sudden death, exercise has been incriminated as the precipitating factor.

3. . . . exercise could precipitate infarction in those with impending infarction.

4. In three subjects, heart attacks developed soon after rugby matches. The period after cessation of vigorous exercise has been referred to as the post exercise vulnerable period, and arrhythmias may be more frequent immediately after stopping exercise than during exercise itself.

And finally,

5. . . . the present report and others linking physical activity with sudden cardiac death suggest that the benefits of exercise have to be balanced against a small risk of sudden death.

In conclusion, sudden death occurred in a 37-year-old Caucasian male who was strenuously playing tennis. The decedent's autopsy findings demonstrated, among other things, significant arteriosclerotic coronary artery disease. On the basis of present medical knowledge, it seems reasonable to assert that coronary arteriosclerosis was indeed a pre-existing condition which caused the death to be more easily produced by the strenuous exertion. The latter was the *intervening factor* between coronary artery disease and sudden death. Or, could it be possible that his unexpected death while playing tennis was merely coincidental? Can one categorically state that there is no such thing as "effort-induced" death? The weight of current evidence from the medical literature cited previously tends to favor the existence of sudden death induced or precipitated by strenuous effort or exertion.

SUMMARY

This report depicts a 37-year-old Caucasian male who succumbed to sudden death while playing tennis strenuously. Autopsy findings revealed coronary arteriosclerotic disease. Medical and legal considerations were presented with respect to the "cause," "precipitating or aggravating cause" and intervening factor of strenuous exercise in sudden death. It is concluded that the strenuous exertion was the precipitating cause of death and that the pre-existing coronary artery disease caused the death to be more easily produced by the strenuous exertion. □

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1976 Amended School Immunization Law

Prior to 1976, the State of Oklahoma had a school immunization law requiring children attending schools to be protected against the various childhood diseases. However, this law was not strictly enforced due to the fact that there was no clear-cut understanding as to which agency had the overall responsibility of enforcement. Consequently, children continued to attend school without the necessary immunization protection and Oklahoma, like other parts of the country, had numerous unnecessary outbreaks of disease within the school system.

Effective September, 1976, a new Amended School Immunization Law went into effect mandating all children attending schools in Oklahoma be protected, by immunization, against diphtheria, pertussis, tetanus, polio, measles, and rubella. Also, under the new amended law, the Oklahoma State Department of Health became the enforcement agency in assuring proper compliance with the new state mandate.

Beginning in September, 1976, parents were granted a 120-day "grace period" to allow them time to have their children properly immunized, to meet the final deadline of January 1st, 1977, thus assuring their children's continued attendance in school. Following the January, 1977 deadline, a great number of children were barred from attending school, because they were still not in compliance with the new immunization law. When schools reopen in September, 1977, there will be no "grace period" allowed and those children not meeting the requirements of the Amended School Immunization Law may not be enrolled in school. The only



News From The Oklahoma State Department of Health

exception being those children who are transferring to a school from another either in-state or out-of-state. These children will be granted 14 days to permit their records to be sent from the previous school. Each child must meet one of the following conditions of the new Amended School Immunization Law; (1) have received no less than 3 doses of DPT or DT, 4 doses of polio, 1 dose of measles, and 1 dose of rubella vaccines, (2) be in the process of receiving these vaccines, or (3) present, in writing, a certificate of exemption, based on either medical, religious, or parental objections.

The Oklahoma State Department of Health will, beginning in September, 1977, send into the counties a team to audit the school health records to identify any and all children who still are not in total compliance with the school immunization law. Once these children have been identified, the team will work closely with the local health agencies and the schools to assure the availability of vaccines and medical services to assist families, if necessary, in acquiring the needed immunization protection. This effort in protecting these children will take place the day following the completion of the school audits. Any parents not availing themselves of these medical services or producing a certificate of exemption, may have their children barred from further school attendance until such time as they are in compliance with the immunization law. ☐

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American Medicine Prognosis: Guarded

Report of the Executive Vice-President

By James H. Sammons, MD, Executive Vice-President, American Medical Association, June 19th, 1977



AMA Executive Vice-President, Dr James H. Sammons.

EDITOR'S NOTE: Last month The Journal carried in full the address of Health, Education and Welfare Secretary, Joseph A. Califano. Califano's speech was made before the AMA's House of Delegates at the annual meeting this June in San Francisco. Califano outlined in vivid detail many of the plans HEW has for medicine. Many physicians' fears concerning national health insurance were made all too real by the Secretary's address.

Also appearing before the AMA House of Delegates was AMA Executive Vice-President, Dr James H. Sammons. Dr Sammons provided an update on the affairs of the AMA, both financial and otherwise, and made a plea for a unified effort in combating ever increasing control by the federal government. The following is

the entire text of Dr Sammons' address. The Journal is pleased to be able to present these two special reports.

In making this third report of the Executive Vice-President to the House of Delegates, I find it a welcome change not to have to spend much time on the financial condition of the American Medical Association.

Our reserves, especially our liquid reserves, are at appropriate levels and approaching the targets this House set when dues were increased at the 1975 annual meeting. Our operating statement is equally healthy, partly because membership is at a level above our projections, partly because advertising revenues are stronger than we expected, and partly because we were a bit too optimistic about the speed with which we could fully implement new, authorized programs.

While the financial figures look good, I want to caution you that there remain unresolved two potentially substantial liabilities, in respect to the US Internal Revenue Service and the US Postal Service. In looking at long range commitments, I would remind you also that we are pledged to test the constitutionality of the Health Planning Act and to defend our ethical position against the complaint of the Federal Trade Commission. Just what those commitments will entail in terms of outside legal fees is hard to determine.

In view of all those indeterminable considerations, we must continue the 1975 policy adopted by the House of Delegates to maintain strong financial reserves. To do otherwise would be foolhardy.

Reflecting further on the important events of the past six months, I think it appropriate to report on the beginnings of our relationships with members of the new administration. We have had meetings with HEW Secretary Califano and other key people in the executive branch, all of them generally constructive.

Yet we have come away from them with a widely shared feeling that the administration right now appears long on shadow but short on substance. I am personally uneasy that there is too much gesture, too much vagueness in Washington now — some hard thinking possibly, but soft programming, a lot of head but little beer.

As an example of the sort of thing I refer to, I would cite the handling of the National Health Insurance Advisory Committee. This Commit-

tee was formed with representatives of all points of view, including ours, presumably to have input into HEW's proposal. But now it is clear that the Committee is neither to make a report nor to have any real input into the development of the administration's thinking. Why bring in important people, and then tell them, at the first meeting, that their deliberations are not really going to count? It is an empty gesture indeed. And we are not alone in recognizing it.

Certainly we want to keep the lines of communication open, and we will do so. But as we are all aware, meetings for the sake of meetings are the emptiest gestures of all.

I have expressed our fears that the new organizational structure within HEW will weaken the role of the Assistant Secretary for Health, thereby diminishing the purely medical side of HEW's decision-making process. That is not in the best interests of the health of this country, nor is that in the interest of physicians. We are on record as seeking a free-standing federal Department of Health, taking the H out of HEW and making it independent under a Secretary of Cabinet rank. Short of that, we would urge a Department of Defense structure for HEW, with a Secretary of Health on the same level as the Secretary of the Army, Navy, and Air Force. The health of the American people is important enough to justify that sort of emphasis.

It is clear to me, though, that health is not the top priority in the new administration. Cost-control is. Witness the creation of the powerful new Health Care Financing Administration. Witness the unworkable legislation proposed to cap hospital revenues.

I would add parenthetically that we are truly dwellers in Cloudland if we do not anticipate some similar future move to cap physician fees.

As someone just back from a good look at the British National Health Service, let me tell you what happens when cost becomes the overriding factor in medical decisions. First you get rationing of care to patients. Next you get second-rate medical equipment. Then there is a predictable pinch on physician training. And finally, somewhere down the road, you wake up one day to find you have a second-rate medical care system instead of a first rate system.

I do not think that HEW's efforts at cost containment will be permitted to go that far. But the temptation is there. So is the political appeal to the pocketbook.

Frankly, I think HEW tends to listen too much to computers rather than to people. There is a unilateral quality to HEW decision-making that I find disturbing. I really have to ask, for example, what segments of the American people benefit from that incredibly botched list of Medicare recipients last March. Or who is going to benefit from the three-quarters of a million dollars now pledged to develop the new, improved list of physicians serving elderly patients. I certainly should think that HEW could come up with a more people-oriented way of spending \$750,000 from our national health resources.

Just what sort of national health insurance proposal is contemplated by the Carter administration is hard to say. But no matter what it is, it will likely work at cross-purposes with those in HEW who consider curbing the rise in medical care expenditures the main item of priority. In health policy as well as others, there are strongly competing dynamics in Washington, and their resolution is far from clear.

Because the plans of the Carter administration for major health legislation are still only general, I do not want to make any specific forecasts. However, there is no question but that important challenges lie ahead for our profession. It therefore seems appropriate to give you my evaluation of the AMA's organization position as we face these challenges.

I would remind you, first of all, that the major issues before us are public issues. While



Leading medicine in different directions are Dr James H. Sammons, AMA Executive Vice-President (l) and HEW Secretary Joseph A. Califano (r).

they will not be resolved by plebiscite, they will certainly be resolved within the participatory climate of these times. Public opinion, or more precisely what legislators think is public opinion, therefore becomes a matter of urgent importance to us.

When you review the independently gathered public opinion data that is available to us through the Gallup organization and the Spencer/Roberts study, done in conjunction with Market Opinion Research, a picture of surprising AMA strength emerges. The credibility of the AMA, relative to other institutions in our society, rings out loud and clear. In terms of credibility of communications — which I think is a fair index — there is not a business, trade, professional, labor or governmental group that outranks us. Public confidence in the AMA is high. 71% of the public says it has either a "great deal" or a "fair amount" of confidence in the AMA. That is an impressive score in these times of general distrust of establishment organizations. As medicine goes into its challenges, we open with a hand that holds encouragingly high cards.

Physicians themselves still rank first in public ratings of various professions for honesty and ethics, slightly ahead of engineers and college teachers, considerably ahead of journalists, lawyers and legislators. I cannot help but be concerned, however, that high as physicians stand, relative to others, 44% of the public rates our honesty and ethics as average, low or very low. Our marks are poorest among non-whites and families where income is less than \$3,000 per year. And that is disturbing.

Generally speaking, though, the public expresses satisfaction with the care it receives. You have seen various polls reporting consistently that 80% or 85% of the people are either satisfied or well satisfied with their care. Our recent Spencer/Roberts-Market Opinion Research report, which asked consumers about their last medical experience, found that 56% reported a "good" experience, only 18% a "bad" experience. This same study identified cost as the overwhelming concern to the public — and to physicians too.

Hospital costs received the principal focus, yet consumers feel that physicians represent the single largest controlling factor in hospital costs. Availability is the second major public concern. But for every person who identifies

that as a key issue, nearly three others list cost. I am going to come back to the subject of cost. But I want to say here that each member of the medical profession has got to acquaint himself better with the patient cost of every procedure he orders and to think twice about those of marginal cost/benefit value. By the same token, the public must be aware of what their behavior adds to cost because of nuisance suits or the threat of malpractice.

What I find particularly interesting in our public opinion surveys is the method by which the public forms its impressions of medicine. The main source of information is not the one we worry about most — newspapers, magazines or TV; it is word of mouth. There are now 2.9 million visits per day between patients and physicians, and the public attitude is formed overwhelmingly by that experience, not by what is said or is not said by the media. It is the way in which we as individual physicians deal with people as individual patients that counts. It is not what the media says that forms public opinion, but what we do.

Public perception of medicine is basically the vast sum of millions of small daily reactions by patients to the way they are dealt with, talked to and treated, medically and personally. *That* is how the physician image is formed.

The other important element in the public perception of us relates to the part of the AMA's activities that have public visibility. Much of what the AMA does, especially in terms of continuing education, informational services, and the monitoring of standards, is only vaguely visible to the public. What the public does see of the AMA as an organization falls into two categories: what the AMA does as perceived as being in the physician's interest and what the AMA does as perceived as being in the public's interest. It is my impression that an important trade-off exists here. We are a professional organization, representing physicians, and part of our energies are directed to the legitimate interests of the profession. The public is not surprised by that, nor is the public offended. But the public will consider those pursuits justified *only* if it believes that we, as an association, are simultaneously and energetically living up to our public responsibilities as well.

On the strength of this purely personal assumption of a *quid pro quo*, it is reassuring to be able to cite a number of programs addressed to our public obligations. Possibly the most vis-

ible recently is our action on TV violence, a subject on which there is a more detailed report to you from the Board of Trustees. I would only add that this kind of alert to a possible medical harm is only what is expected of us. We have worked closely with the PTA, the National Citizens Committee on Broadcasting, Action on Children's TV and other groups. We have also had constructive discussions with important advertisers, notably the General Foods Corporation. Sears and Roebuck, Greyhound, Eastman Kodak, Pillsbury, General Motors, and Schlitz are just a few companies among many that I might list who have expressed recent concern with this issue. A reduced amount of violent programming seems to be in the cards for next fall's network schedules.

And I would add that it greatly becomes the networks to assume a posture of shrinking violence.

I cannot claim that the apparent improvement is attributable to us alone, or any other one group, for that matter. But this year the on-going outcry against violent programming has had a heavier impact than ever before, because this year the weight of medical opinion was added to it.

The AMA program on the state of medical care in jails — a scandal in many places — represents another instance of meeting our responsibilities as the public perceives them.

Although it is still a long way from a final report, the AMA Commission on Cost of Medical Care represents another case of responsive action. In terms of meeting our public responsibilities on this important public concern we have taken a first step through the establishment of the Commission on Costs. But to meet those responsibilities fully, we must be ready to hear some things maybe all of us will not want to hear when the final report is made. If the recommendations are hard and disturbing to us — or to our patients — let's not shy away from them. This House of Delegates will probably have to make some very tough decisions arising from the Commission's findings, and we must not shy away from them either.

More than anything else, the public expects the AMA to police its ranks. That is something I think the public expects of all professional and trade associations. And I think it is something the public has a right to expect. In recent months in particular the AMA has demonstrated a more vigorous, a more effective, and a more visible initiative. In respect to the im-



Governmental bureaucracy: "It is a cancerous, relentless, mindless blob of a force that oozes through the cracks and seeps under the doors and as soon as you stop it in one direction, it creeps in on you from another."

paired physician — the physician with emotional problems, drinking problems or narcotic problems — 30 states have now enacted legislation backed by state medical societies and based on model legislation developed originally by the AMA and approved in this House. Possibly more important may be the action of at least 25 state societies in initiating programs of their own to deal with the small fraction of impaired members of our profession.

We have also suggested to the state societies model legislation intended to broaden the scope of state medical licensing boards. This legislation provides for better reporting, for more accessibility to information and for a wider range of options for disciplinary actions. By giving the licensing boards something more than the Draconian choice between revoking or not revoking a license, the AMA believes that more appropriate, and more effective, and more frequently imposed discipline will result. Six states have adopted legislation along these lines. Some thirty already had similar statutes in place.

We are seeing a great change in medical discipline. In a survey that includes figures from 47 states, the AMA has found that in contrast to 1,300 in 1971 nearly 4,200 disciplinary cases were initiated in 1976. Medical discipline should be more of an educative than a punitive process. But the threefold increase in disciplinary actions should be noted. And the initiative shown by organized medicine in helping the licensing boards move in that direction should be noted as well.

Yet I must add that we still have a way to go. Great progress has been made in many states. But in others the old problems still exist: underfinanced licensing boards, lack of staff, poor quality of staff, bad liaison with the profession itself and that traditional bane, politics. When any board is constituted by political appointment, political pressure — or the threat of political pressure — can be applied. And that should simply cease to be.

It is unfortunate that most of the public believes that the profession itself does the licensing and therefore the delicensing, that the state medical society or the AMA holds the real disciplinary powers. In the public mind we are charged with the responsibility for disciplining doctors, but we both know that we lack the accompanying authority. The best way out of that squeeze is to do what we have been doing — exerting more pressure on the licensing boards to act as we might act if we had their powers. Where appropriate, I urge state societies to continue the effort for wider adoption of the AMA's stronger licensing bills.

While I see us meeting our public responsibilities in a more forceful way, I wish I could see more movement in terms of professional unity. That is not to say we are losing ground. We are not. But progress toward a unified profession should be dynamic rather than static. On broad legislative issues our effectiveness is in direct ratio to the unanimity we display. The achievements at the state level that I have just referred to, for example, came about where the profession was united in its position. Our recent success in modifying H.R. 3816 exemplifies what a unified effort can do. Thanks to efforts by many medical organizations the provisions of this bill, granting ruinously arbitrary powers to the FTC over non-profit organizations, was dropped in Congressional committee hearings. That was an important

legislative victory, not only for us, but also for organizations like the Boy Scouts, the Heart Association, the NAACP and the American Civil Liberties Union.

Probably the single most effective step we can take toward greater unity is before you — in the form of the Council on Long Range Planning's report on specialty society representation in the House of Delegates.

Much of the disunity in medicine coincides with the post-World War II trend toward greater specialization, in itself a result of explosive growth in medical knowledge. As physicians have become more specialized during this period, loyalties have tended to diffuse. In a purely scientific sense this may have had a strengthening effect. But in other respects, particularly in regard to the broader issues that should concern the physician universe, the effect has been to disperse our power.

I think it is time to seek an adjustment in our system of representation, a time to expand our House of Delegates so that the specialty society structure that exists may be more realistically recognized and its views more properly incorporated. Medicine is pluralistic, a condition which has been acting strongly as centrifugal force. But, through the suggestion before you, that same energy can be converted into an equally strong centripetal force. It is critical that we merge our forces on the broad issues. This House of Medicine must not be a house divided.

Finally, I want to remind physicians again of the importance of wider individual membership and personal involvement at all levels — county, state, specialty society *and* national. Think how much stronger we could be if only each current member could bring into the federation next year just one colleague who does not now belong. If any state wants to launch a program like that we'll help set up the names for a one-on-one membership drive. Constituting only 17 one hundredths of one per cent of the US population, we need every bit of clout we can develop in terms of numbers.

We are respected as a profession. And our national organization — the AMA — is respected. It scarcely needs saying that we — and by that I mean every physician in this country — face tremendous challenges. And we can only face them successfully if we face them together. All of us. Not half of us. Or two-thirds of us. Or some other fraction.

I am sure that during at least one post-

mortem over a lost political fight you have said, as I have said many, many times, "Why couldn't we have stopped the in-fighting among ourselves? Why didn't we close ranks, forget our differences, as the opposition did? And for God's sake why didn't we get the voters out?"

Sound familiar? I'm sure it does.

But I'm not talking now about Republicans versus Democrats. I'm talking about the future of your profession and mine. And what is ultimately best for our patients.

The plain and simple truth of the matter is that we cannot afford to go on as we sometimes do, jealous over fiefdoms, squabbling among ourselves, so concerned with skirmishes that we lose track of decisive objectives. Do we want to go the way of our colleagues in England? They are a perfect example of what disunity can produce.

If we cannot hang together better than we've been doing, we don't deserve to win the battles we have ahead of us.

In the AMA, the medical profession has a workable mechanism for airing viewpoints and democratically arriving at consensus. Your AMA is now a strong organization financially.

It knows the ropes in Washington. It stands high in public credibility.

If it is to accomplish objectives for the profession, then the profession must understand this:

Physicians are individualistic men and women — by training, by inclination and by experience. And individualism is a fine thing.

But carried to an extreme, individualism can badly weaken the unified effort we must be making. At one point in history there was a European parliament so constituted that each member had veto power.

You can imagine how much was accomplished.

Organized medicine just cannot accommodate that kind of divisive luxury and still hope to repel the deadening weight of the governmental bureaucracy. It is a cancerous, relentless, mindless blob of a force that oozes through the cracks and seeps under the doors, and as soon as you stop it in one direction it creeps in on you from another.

Let's keep our individualistic ways and attitudes. But let's also show some restraint. For if we don't, then a strong, united profession is impossible. And without that, there isn't going to be much individualism left for any of us. □

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Congress Eyes Health Legislation

As Congress moved closer to its anticipated summer recess (August 5th-September 7th) most of the major health issues were in a state of flux with committee recommendations on major bill provisions unpredictable. While increased congressional activity on legislative measures was expected, predictions of the final action on many of the bills was difficult. As the September *Journal* went to press:

*Physician extender legislation appeared destined for final passage. A bill, HR 8422, had been reported from the House Ways and Means Committee and had been referred to the House Interstate and Foreign Commerce Committee. The Senate Finance Committee was expected to add to a House-passed tariff bill provisions

which would provide Medicare and Medicaid reimbursement for physician extender services rendered in rural health clinics. If the Senate action is successful, a House-Senate conference on the tariff bill would include the subject of federal payment for physician extender services.

*Hospital-cost containment legislation was receiving daily consideration by both House and Senate committees with several key issues in the various proposals still being debated.

*The anti-fraud bills, HR 3 and S 143, appeared to be headed for floor action after the summer recess. HR 3 was before the House rules committee, having been reported from both the Ways and Means and the Interstate and Foreign Commerce committees. S 143 was to be considered by the Senate Finance Committee.

The following is a brief update on other important health legislation.

Bill No.	Description	Status
HR 1818 Murphy, Duncan, S218 Hansen	<i>Comprehensive Health Care Insurance Act of 1977</i> (AMA bill)	Referred to House Committees on Ways and Means and Interstate and Foreign Commerce; Senate Committees on Finance and Human Resources.
HR 21 Corman S 3 Kennedy	<i>Health Security Act</i> (Labor bill)	Referred to House Committees on Ways and Means and Interstate and Foreign Commerce; Senate Committees on Finance and Human Resources
HR 1702 Scheuer S 370 Javits	<i>Maternal and Child Health Care Act</i>	Referred to House Committees on Interstate and Foreign Commerce and Ways and Means. Senate Committee on Human Resources.
HR 5 Burleson S 5 McIntyre	<i>National Health Care Act of 1977</i> (HIAA bill)	Referred to House Committees on Ways and Means and Interstate and Foreign Commerce; Senate Committee on Finance.
S 705 Javits HR 6221 Rogers	<i>Clinical Laboratory Improvement Act of 1977</i>	Passed in the Senate by a voice vote 7/28/77. House Committee on Interstate and Foreign Commerce: hearings held. Ways and Means Committee.
HR 1003 Murphy	To establish a <i>Department of Health</i>	Referred to Committee on Government Operations.
HR 54 Symms S 1683 Helms	Eliminate <i>drug efficacy</i> as a test in regulatory policy	Referred to House Committee on Interstate and Foreign Commerce. Senate Human Resources Committee: hearings scheduled.
HR 1603 Rogers S 1831 Kennedy	<i>Drug Safety Amendments of 1977</i>	Referred to Committee on Interstate and Foreign Commerce. Senate Human Resources Committee: Hearings held.
HR 6575 Rostenkowski, Rogers	<i>Hospital Cost Containment Act of 1977</i>	Referred to Committee on Interstate and Foreign Commerce: hearings held.
HR 8121 Rogers HR 8337 Rostenkowski	<i>Hospital Cost Containment Act</i>	House Ways and Means: hearings held; markup. Senate Human Resources Committee: hearings held; markup. Senate Human Resources Com-

S 1391 Kennedy *Hospital Cost Containment Act*
S 1878 Schweiker

HR 3 *Medicare-Medicaid Anti-Fraud
and Abuse Amendments*
Rostenkowski,
Rogers S 143
Talmadge

HR 8422 *Medicare reimbursement for
physician extenders'*
Rostenkowski *services in rural areas*
S 708 Clark

S 1470 Talmadge *Medicare-Medicaid Administrative
HR 7079 Rogers and Reimbursement Reform Act*

mittee: hearings held; markup scheduled.
Senate Committee on Finance.

Referred to Committee on Ways and Means:
reported out. Committee on Interstate and
Foreign Commerce; reported out. Senate Fi-
nance Committee.

Replaces 2504. Referred to Committee on Ways
and Means: ordered reported. Committee on
Interstate and Foreign Commerce. Senate
Finance Committee: hearings held. Senate
Agriculture Committee: hearings held.

Referred to Senate Finance Committee: hear-
ings held. House Committee on Ways and Means;
Interstate and Foreign Commerce. □

Physician Review Panel Established

EDITOR'S NOTE:

*At the 1977 OSMA House of Delegates meet-
ing, Dr Orange M. Welborn, Ada, presented a
plan to expand the OSMA Grievance Committee
and to overhaul its procedures in an effort to
make it more responsible to both OSMA mem-
bers and the public. Dr Welborn, who was then
OSMA president, said at the time that the new
Grievance Committee would be designed to in-
vestigate patient complaints and weed out
incompetent doctors. His plan called for the
committee to be expanded from five members to
nine members on a one-year trial basis. It would
then serve as an advisory board to the Okla-
homa Board of Medical Examiners . . . the
only body in the state with the power to suspend
or revoke physicians' licenses.*

*The changes Dr Welborn suggested were
unanimously approved by the OSMA House of
Delegates and have been implemented. Current
members of this Committee are: Dr Ed L.
Calhoun, Chairman, Dr Lucien M. Pascucci, Dr
Stanley R. McCampbell, Dr Jack L. Richard-
son, Dr Arnold G. Nelson, Dr Orange M. Wel-
born, Dr Robert M. Shepard, Jr., Dr C. Alton
Brown and Dr William M. Leebron. It has been
renamed the Physician Review Panel.*

*The following is the protocol which will be
followed by this new committee. For additional
information, see the report of the president in
the July, 1977, Journal.*

OBJECTIVE: The Physician Review Panel
has a responsibility to association members
and to the public to expeditiously investigate
and equitably dispose of complaints or allega-
tions properly filed by anyone against an as-
sociation member.

PROCEDURE FOR INVESTIGATING COMPLAINTS:

Complaints to be investi-
gated by the committee must be written with
the alleged wrongful act clearly stated and
should be accompanied by such other informa-
tion as thought to be helpful in the review pro-
cess. If confidential medical information re-
garding a patient is provided or is necessary to
the investigation, a *Patient Waiver of Confi-
dentiality* form must be signed.

Upon receipt of the allegation the Chairman
of the Physician Review Panel shall acknow-
ledge receipt of the complaint and provide a
copy of the charge to the physician(s) against
whom the complaint has been filed. Concur-
rently the case shall be remanded to the presi-
dent of the county medical society in which the
physician(s) resides with a request that the
matter be investigated and a report made
within a reasonable period of time. The panel
may at its discretion or upon request of a
county medical society take original juris-
diction in a case when factors deem it approp-
riate.

The panel may request information regard-
ing the facts of the matter from any of many
sources, including but not limited to: the par-
ties involved, the hospital, the Board of Medi-
cal Examiners, county medical societies, in-
surance companies and such others as deemed
appropriate and proper. Provided, however,
that such information shall be available to the
physicians in such timely manner as to afford a
proper response.

INFORMAL HEARINGS: The Physician
Review Panel, after reviewing the available
facts, may elect to hold an informal hearing to
discuss the matter privately with the
physician(s). The informal hearing is a volun-
tary proceeding and attendance by the

physician(s) against whom charges have been filed is not mandatory. No transcript of the meeting will be made, and no adverse ruling against the physician(s) can be issued. Parties other than those directly involved in the matter may be permitted to attend the meeting at the sole discretion of the chairman of the panel.

At the conclusion of the hearing the panel may:

(a) Dismiss the case on grounds that no unethical or unprofessional conduct was committed;

(b) Dismiss the case on grounds that there is insufficient evidence to prove the allegation;

(c) File charges of unprofessional or unethical conduct against the physician(s) and call for a formal hearing before the association's Board of Trustees.

The decision of the panel shall be transmitted to the parties directly involved.

FORMAL HEARING: The Physician Review Panel, after reviewing the available facts, may decide to conduct a formal hearing for the purpose of gathering additional information. In the event a formal hearing is conducted, all

parties involved in the proceedings shall be entitled to legal representation, the right to introduce evidence and call forth witnesses, and the right of cross examination. A full transcript of the proceedings will be made by the association, and all parties shall have a right to same in the event further action is required.

After the investigation and deliberation of the complaint, the committee shall:

(a) Dismiss the case because of insufficient grounds;

(b) Mediate the complaint to the satisfaction and understanding of all parties concerned;

(c) Recommend corrective action; or

(d) Refer the case to the association's Judicial Council with specific charges along with a complete record and recommendations for appropriate action.

COOPERATION OF MEMBERS: Full cooperation with the Physician Review Panel is expected of all members of the association as well as assistance in securing information necessary for the disposition of the case.

NOTIFICATION: Upon the resolution of any matter brought before the Physician Review Panel, all parties to the action shall be properly notified in writing. □



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DEATHS

PAUL N. ATKINS, SR., MD
1889-1977

Paul N. Atkins, Sr., MD, a longtime Tulsa physician, died July 26th, 1977. Born in Washington, DC, Dr Atkins was graduated from Georgetown University School of Medicine in 1912. Following his internship, his practice was established in Tulsa, where he was named Physician of the Year in 1962 by the Tulsa County Medical Society.

For over a half-century of dedicated service to humanity the OSMA presented Dr Atkins with a Life Membership in 1962.

JOSEPH C. MACDONALD, MD
1881-1977

A prominent Oklahoma City otolaryngologist, Joseph C. MacDonald, MD, 85, died July 14th, 1977. A native of Beloit, Kansas, he was graduated from Tufts University School of Medicine in 1918. Dr MacDonald was Professor Emeritus at the University of Oklahoma College of Medicine, Department of Otolaryngology. He was a Diplomat of the American Board of Otolaryngology and a member of the American College of Surgeons. In recognition of his devoted service to humanity, Dr MacDonald was presented an Honorary-Life Membership by the OSMA in 1961.

RICHARD L. BUTLER, MD
1924-1977

Richard L. Butler, MD, Fort Sill physician, died May 27th, 1977. Born in Des Moines, Iowa in 1924, Dr Butler was graduated from Harvard Medical School in 1952. He practiced in Massachusetts before coming to Oklahoma in 1976. At the time of his death he was Chief, Health and Environment Activity at Reynolds Army Hospital. Dr Butler was a member of the American College of Surgeons and the Royal Society of Medicine.

PERRY E. HEWITT, JR., MD
1911-1977

Muskogee physician, Perry E. Hewitt, Jr., MD, died July 16th. Dr Hewitt was graduated from the University of Oklahoma College of Medicine in 1937 and took his internship at McGill University and Montreal Neurological Institute, Montreal, Canada. He served with the British Army and the American Medical Corps during World War II. Following his discharge, he entered private neurological practice in Muskogee where he remained until his retirement in 1970. The Oklahoma State Medical Association had awarded Dr Hewitt a Life Membership in 1970. □

Washington Physician Named AMA Board Chairman

Dr Robert B. Hunter of Sedro Woolley, Washington, has been named chairman of the Board of Trustees of the American Medical Association.

Dr Hunter's selection by his fellow board members came during the AMA's annual convention in San Francisco. He succeeds Dr Raymond T. Holden, of Washington, DC, whose term expired.

Dr Hunter was first elected to the AMA Board of Trustees in 1971. Previously he had been a member of both the House of Delegates and the Council on Constitution and By-Laws. □

DATES TO REMEMBER

Board of TrusteesAugust 27th, 1977
(OSMA Headquarters) November 19th, 1977
February 18th, 1978

Council on Planning and
DevelopmentSeptember 23rd-25th, 1977
(Shangri-La Lodge, Afton, Okla.)

Council on Planning and
DevelopmentMarch 3rd-5th, 1978
(Oklahoma City)

Oklahoma Medical Summit ..May 3rd-6th, 1978
(Oklahoma City)

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Medicaid Doctors Work Harder And Earn Less, AMA Reports

Medicaid doctors may work harder and earn less money than physicians who treat relatively few Medicaid patients, an American Medical Association study reveals.

An analysis of data from the AMA's Tenth Periodic Survey of Physicians, a random sample of 5,288 physicians practicing in the United States, determined that physicians with a higher proportion of Medicaid-eligible patients in their practices earned an average of \$51,283 in 1974, while physicians treating fewer Medicaid-eligible patients had an average net income of \$53,142.

Also, physicians with high Medicaid-eligible practices reported an average of 139.6 patient-visits per week, while doctors seeing few Medicaid-eligible patients averaged 128 visits per week.

The statistics are contained in the new 1977 edition of *Profile of Medical Practice*, which together with the new 1977 edition of a companion book, *Reference Data on the Socioeconomic Issues of Health*, serve as quick reference guides for health professionals, policy-makers, researchers and journalists. Each brings together in one convenient source a combination of essays and data relevant to the current health care scene. The current new versions are the sixth annual editions of the books.

A comparison of average fees charged for four basic procedures shows that doctors treating more Medicaid-eligible patients charge lower fees than do physicians with fewer Medicaid-eligible patients. The initial office visit charge of the Medicaid doctor, for instance, was \$19.67 in 1975, while the fee for a first office visit of other doctors was \$22.27. For the annual physical examination, Medicaid doctors charged an average of \$22.90, while others charged \$25.67.

Physicians whose practices include a relatively greater proportion of Medicaid-eligible patients tend to be younger, are slightly less experienced, are more likely to be graduates of foreign medical schools, and are less likely to be board certified, the survey found.

On the average, Medicaid-eligible patients as a whole represent 16.7 per cent of the patients of American doctors. But most of them are seen by a minority of the doctors. More than half of all physicians report Medicaid-eligible patients are less than 10 per cent of

their practice, and three-fourths of doctors report less than 20 per cent of their patients are Medicaid-eligible. On the other hand, 5 per cent of the doctors report having 50 per cent or more Medicaid-eligible patients. □

New Health Commissioner Takes Office

Dr Joan K. Leavitt, the state's first female Commissioner of Health, took office July 1st, 1977. The Oklahoma State Board of Health named the 18-year veteran in the field of public health to the post at its June 11th meeting in Oklahoma City. Dr Leavitt replaces Dr R.

LeRoy Carpenter, who resigned from the position last September. The job had been temporarily filled by Walter D. Atkins, DDS.

Dr Leavitt, who had served as Deputy Commissioner of Health for personal health services since last September, has been associated with public health in Oklahoma since 1959. She first served on a part-time basis as pediatrician in the guidance unit in Comanche County, then in Jackson County. She was full-time medical director of the Jackson County Health Department from 1964 through 1967. She also served as medical director for Kay County Health Department from 1967 until 1976, and as medical director for the Payne County Medical Department from 1975 through 1976. She moved to Oklahoma City in April of 1976 to become Chief of Maternal and Child Health Services at the Oklahoma State Health Department.

The new Commissioner of Health was born and educated in Massachusetts receiving her BA degree from Ratliff College, her MA degree from Smith College, and her MD degree from the Boston University School of Medicine. She did her internship and one year of residency in pediatrics at Boston City Hospital. She did her final two years of residency at Massachusetts General Hospital in Boston. □



Oklahoma Doctors Named Neurosurgical Officers

Two Oklahoma doctors were elected officers of the Rocky Mountain Neurosurgical Society during its June 8th-12th, 1977, meeting in Lake Tahoe, Nevada. Dr Ralph Kaplan, Oklahoma City, was elected secretary of the organization and Dr R. Barton Carl, Oklahoma City, was named treasurer. Other officers are Dr George T. Hoffman, Phoenix, Arizona, President; Dr Michael McNalley, Colorado Springs, Colorado, President-elect; Dr Thomas Craig-mile, Denver, Colorado, Historian; and Dr Harry Starr, Beaumont, Texas, member-at-large.

The group's next annual meeting will be held June 11th-14th, 1978 in Colorado Springs, Colorado. □

Three Days of Pediatrics For the Practitioner

The Third Annual Tulsa Pediatric Colloquy, in association with a Pediatric Symposium of Hillcrest Medical Center/John Steele Zink Medical Institute will be presented on October 13th, 14th, 15th, 1977. On October 13th and 14th, the colloquy will be held in the auditorium of Children's Medical Center, 5300 East Skelly Drive, Tulsa. On October 15th the pediatric pulmonary symposium will meet in the Gold Room of the Rehabilitation Center of Hillcrest Medical Center, Utica and 11th Street, Tulsa.

Sponsors for the three-day meeting will be the University of Oklahoma Tulsa Medical College, Children's Medical Center, Oklahoma Chapter of the American Academy of Pediatrics and Hillcrest Medical Center/John Steele Zink Medical Institute.

Guest faculty for the colloquy and symposium will be Guilio J. Barbero, MD, Chairman, Department of Pediatrics, University of Missouri, Columbia; James P. Keating, MD, Associate Professor of Pediatrics and Head, Division of Gastroenterology, Washington University, St. Louis; Owen M. Rennert, MD, Chairman, Department of Pediatrics, University of Oklahoma, Oklahoma City; Saul J. Robinson, MD, Clinical Professor of Pediatrics, University of California and Vice-President of the American

Academy of Pediatrics; James J. Corrigan, MD, Professor of Pediatrics and Head of the Hematology/Oncology Division, University of Arizona, Tucson; John N. Lukens, MD, Professor of Pediatrics and Head of the Hematology/Oncology Division, Vanderbilt University, Nashville; R. Michael Sly, MD, Professor of Pediatrics and Head of the Division of Allergy/Immunology, Louisiana State University, New Orleans; and, Lynn M. Taussig, MD, Associate Professor of Pediatrics and Head of the Pediatric Pulmonary Division, University of Arizona, Tucson.

For further information write or call the Department of Pediatrics, University of Oklahoma Tulsa Medical College, 2727 East 21st Street, Tulsa, Oklahoma 74114 (918 749-5531). □

Workers' Compensation

House Bill 1228, known as the "Workers' Compensation Act" and signed into law on June 16th, contains many areas of reform. For several years the state medical association has tried to persuade the Oklahoma Legislature to take the determination for disability out of the doctor's office and put it in the court where it belongs. The Workers' Compensation Act *now* lets the physician function in his medical environment for which he was trained by allowing him to rate the injured patient's bodily impairment rather than the amount of disability involved with manual labor. The political-legal system can then use the medical report plus other variables to determine the remuneration to the injured worker.

Another significant change in the law concerns divergent medical testimony on behalf of the employee and employer. When the testimony varies by thirty percent or greater the employer and employee select a third physician to carry out an examination of the patient. If a mutual agreement can not be reached as to a third physician then the court will do the selection.

The new law has other reform features such as vocational rehabilitation for the injured worker which will help the person to regain a productive prominence again.

The "Worker's Compensation Act" from the standpoint of medicine has accomplished some advantageous amendments. The bill is obviously not perfect but at least now the physician is taken out of the political-legal arena and allowed to simply practice medicine. □

OPA Urges Prescription Changes

The Oklahoma Pharmaceutical Association has urged that all physicians prescribing medications in hospitals be required to print or stamp their names and drug enforcement administration numbers on the prescription blanks. The action was taken at the OPA's June 10th-12th, 1977, annual meeting in Oklahoma City.

According to the resolution approved by the state's pharmacists, many prescription orders are presented to hospital pharmacists on hospital blanks without the imprinted name of the physician. This, states the resolution, makes it "impossible to ascertain whom to contact in the event of a question pertaining to the prescription order." The OPA resolution urges that prescribers be required to print or stamp their name and DEA number on the blank in order to "make the prescriber readily identifiable."

In a separate action, the OPA also approved a resolution which urges prescribers to write only one prescription per prescription blank. Pharmacists must file control substances in a separate file with a separate prescription number. This is made more difficult, says an OPA spokesman, when multiple prescriptions are written on the same prescription blank.

In other action the OPA elected George Brown, Waurika, OPA president, and George Kirk, Muskogee, president-elect. □

BOOK REVIEWS

The Metabolic Basis of Inherited Disease. 3rd Ed., Edited by J. B. Stanbury, MD, J. B. Wyngaarden, MD, and D. S. Fredrickson, MD, 1,778 pages. New York: McGraw-Hill, Inc., 1972. Price \$45.00.

Since the appearance in 1960 of the first edition of this book, the flow of new knowledge on inborn errors of metabolism has been so rapid that a second and now a third edition is needed. This edition is organized in a similar fashion as previous editions with an appropriate increase of new information. As with previous editions, the most impressive feature of this new edition is the completeness of the descriptions of the biochemical and clinical features of each entity included. The only significant overlap between the second and third edition is in the discussions of carbohydrate and aminoacid metabolism. There is extensive revision deal-

ing with concepts of the biochemical abnormalities of many disorders. This edition maintains the high quality of previous ones. It is a standard reference which is to be recommended. Perhaps its only drawback is that the reader, to be comfortable, must have a fairly extensive background in biochemistry, since a large number of assumptions are presumed. *Harris D. Riley, Jr., MD*

New Chromosomal and Malformation Syndromes (Birth Defects: Original Article Series). Vol. 11, No. 5. Edited by D. Bergsma, MD, D. L. Rimion, MD, D. W. Smith, MD, and R. S. Sparkes, MD, 361 pages. Symposia Specialists, 1975. Price \$16.95.

This book is a collection of papers presented at a birth defects conference held in 1974 in Los Angeles. Most of the papers are reports of one or more cases, some with recently described syndromes, others with unusual combinations of abnormalities or with unique chromosomal aberrations and some with previously described rare syndromes. More than half of the volume is devoted to papers on malformation syndromes, while the remainder is concerned with chromosomal syndromes, et al. The discussion following the papers is quite brief.

The book is extensively illustrated and most of the illustrations are of good quality. The index is quite adequate.

This book will be of the greatest interest to those health workers concerned with the delineation of malformation syndromes with and without chromosomal abnormalities. It is a reference work. *Harris D. Riley, Jr., MD*

Respiratory Physiology. 2nd Ed. By N. B. Slonim, MD and L. H. Hamilton, MD 229 pages. St. Louis: C. V. Mosby Co., 1971. Price \$10.75.

One of the chief purposes in revising a book which deals with a subject that is already well-covered by others is to integrate new material with older standard concepts. This book achieves this purpose only in part, as its coverage of both new concepts and older principles is uneven in several places. The first chapter describes the transition of respiratory physiology from a discipline that was largely involved with esoteric and static measurements to one that is progressively more concerned with clinical settings. New areas in respiratory physiol-

ogy covered include the description of the effects of uncommon environments, air pollution, exercise and a section on neonatal physiology. The chapter on clinical evaluation of pulmonary function is spotty and several of the tests selected for discussion are not widely employed by clinicians.

All in all, this book is useful as a reference for a specific respiratory function methodology but it does not represent an integrated survey of the field. *Harris D. Riley, Jr., MD*

RECENT ADVANCES IN UROLOGY #2. Edited by W. F. Hendry, New York, Churchill Livingstone, 1976, pages 353, \$32.50.

This monograph includes 14 sections concerning recent developments in urology. The preface states that it is hoped the book will prove useful for the trainee-surgeon in studying for higher examinations. Fourteen chapters are provided by fifteen contributors, all from London. These include seven urologists, two nephrologists, four radiologists, one oncologist and one pathologist. As stated in the preface, the

growth of urology has been largely due to three factors — consistent accuracy in pre-operative diagnosis, improvement in operative surgical techniques, and increasingly effective interdisciplinary collaboration. While it is true that all three of these have made a contribution in urology, it is apparent from reviewing this monograph, that the last, namely interdisciplinary collaboration, has been the most productive. Each of the sections such as "Radiological Diagnosis," "Biochemical Aspects of Stone Disease," "Injuries to the Urinary Tract," are self-limited sections. The chapter dealing with urinary tract infections by Cattell provides a concise, but well-written summary of the diagnosis and management of this important problem. One of the best sections is that by D. Innes Williams entitled "Obstructive Uropathy in Children." Dr Williams is a leader in this field and as usual, his writings are succinct, to the point, and illustrated by excellent photographs.

Urologists and others will find much of interest in this compilation of recent occurrences in urology which emanates from our British colleagues. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

FOR SALE: Frigitronics Cryosurgery machine. Used less than 100 times. Will accept best offer in the next five months. Contact Casey Truett, MD, 500 East Robinson, Norman, Oklahoma 73071, 405 364-6860.

OB-GYN, board certified/eligible to join established solo OB/GYN in Oklahoma, 30 miles from Oklahoma City. Salary then partnership. Terms flexible. Send curriculum vitae. Write to Key N, *The Journal of the Oklahoma State Medical Association*, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118.

BOARD CERTIFIED OR ELIGIBLE INTERNIST is sought with or without subspecialty interest to associate with another internist in a busy office-hospital type practice. Salary of 40 M with many other benefits of a corporate practice, association with a 500-bed general hospital. Please contact: James D. Green, MD, Ranch Acres Medical Center, Tulsa, Oklahoma 74135.

WE ARE IN NEED OF A GENERAL PRACTITIONER for the town of Allen, Oklahoma, a community of approximately 1,100 with a drawing area of 5,000-6,000. Eighteen miles from hospital facilities. There is a nice, well-equipped clinic in town. Contact Wayne Bullard, 405 857-2492 or Virgil E. Smith, 405 857-2402, P.O. Box S, Allen, Oklahoma 74825.

ATTRACTIVE OFFICE SPACE NOW AVAILABLE in Ponca City. Near new Medical Center Hospital. Approximately 1,056 square feet with adequate parking in well kept professional building. Call 405 524-2439 or write Zelma Bonnell, 430 N.W. 35th, Oklahoma City, Oklahoma 73118.

FOR SALE, NOT FOR LEASE. A well-equipped Family Practice office in a good residential area two blocks west of University of Oklahoma main campus, in a nine-room, two-story house with basement, two car garage and garage apartment with 360 square feet living space. Corner lot 137.5 x 140. MD office for 30 years. All in good condition. Plenty off street parking. Contact T. A. Ragan, MD, 619 West Boyd, Norman, Oklahoma 73069. □

How About Tomorrow?

As steadily as running water erodes stone, the program of vilification of the medical profession, mounted and maintained primarily by the federal government and the news media, is eroding the morale of everyone engaged in providing health care for our nation's public. The unrelenting publicity afforded the numerically few and statistically miniscular cases of medical misadventures creates the impression that they are the rule rather than the exception. And such an impression generates powerful responses.

Physicians, nurses, medical technicians and hospital employees, most of whom are conscientious, sensitive, intelligent people, are resentful of the unwarranted assault on their integrity. They know the facts. They know what sacrifices they make and they can recognize lies and distortions.

Patients respond, also. But their responses are less homogeneous and more complex. Usually, they do not know the facts and they cannot recognize the lies broadcast about our health care system and its personnel. They don't know of the sacrifices which are made on their behalf. They cannot measure integrity so readily. Understandably, they begin to suffer doubts and fears about their physicians and nurses and technicians and hospitals. They become bewildered, unsure, confused. And it follows that they also become resentful, suspicious and aggressive if not openly hostile.

Certainly no gifted intellect is necessary to understand the potential hazards involved when defensive, resentful physicians and nurses are called upon to care for resentful, frightened and suspicious patients. The costs of care spiral upward; efficiency is virtually lost as time is wasted in sparring — and otherwise unnecessary studies become essential elements in the practice of defensive medicine. The personalities involved become adversaries. Patients become cases. Reassurances become guarantees. Human errors become crimes.

Tragically, the real rewards of serving humanity in the fields of health care are disappearing. They are being replaced by penalties. Pride is yielding to scorn and a once-healthy morale is being afflicted by depression.

It is inevitable that such changes will make all careers in health care unattractive, not only to prospective students but also to many persons already trained and experienced and currently working in one of the health services. When virtuous motives are abandoned, material objectives will prevail and the material rewards of patient care are relatively trivial. On an hourly basis, the offerings of almost all other careers are more attractive.

Where will tomorrow's physicians and nurses and technicians come from? What will motivate them? Who will train them?

Haunting questions . . . which cannot be answered today.

MRJ

All of us who are involved in the practice of medicine, and especially those of us who are also involved in the various aspects of organized medicine, are very goal-oriented people. In this President's Page I would like to talk about the very important goal of increasing the number of residency positions in the state and the number of practicing physicians in underserved and rural areas of Oklahoma. I would also like to discuss the activities of an organization which I have had the pleasure of being closely involved with and one which is tackling the problems I have just listed . . . the Physician Manpower Training Commission.



This commission was established by the Oklahoma Legislature in 1975 in response to a critical health care/education crisis we faced. National studies had shown that 75 to 80 percent of all residents tended to establish their life-time practices in the locations where they took their residency training. Between 1968 and 1974 the University of Oklahoma Health Sciences Center expanded its graduating class from 92 to 131 physicians, or an increase of 42 percent. With the Tulsa branch of the OU College of Medicine gearing up for an expected graduation of 50 physicians by 1979 and more expansion expected at the OUHSC, 200 physician graduates were planned by the year 1979. Although these new graduates represented the potential solution to Oklahoma's physician manpower shortage, at that point only 85 first-year residency positions were available. This meant after receiving the first four years of their medical education in Oklahoma, over 50 percent of the graduates would have to leave our state to seek residency training elsewhere. According to the national studies this also meant that few of these physicians would ever return.

In addition to the shortage of first-year residency positions, a 1974 study also showed that more than 900 physicians were needed in Oklahoma to meet the national physician-patient ratio of 1 per 800 people. There was also a need to get more physicians out into the rural areas of the state. When the Oklahoma Legislature established the Physician Manpower Training Commission, it charged it with these responsibilities plus those of attracting graduates from outside the state, increasing markedly the number of residency programs in family practice, and with balancing the physician manpower distribution in this state, both geographically and by type of practice.

To accomplish these goals, the PMTC now administers three specific programs. The Oklahoma Rural Medical Education Program is a loan-

forgiveness plan through which a medical or osteopathic student agrees to return to an Oklahoma community with a population of 7,500 or less in return for financial assistance. For each year assistance is granted, the physician is obligated to practice one year. To date, 60 medical and osteopathic students have received scholarship assistance in this manner, 43 of those being medical students.

Another program administered by the PMTC is the Oklahoma Community Physician Education Program, otherwise known as the community matching program. Under this program the state combines resources with an Oklahoma community to provide scholarships to medical students who will agree to return to that community to practice. The matching program is on a 50-50 basis and the contracting medical student must agree to practice one year for every \$5,000 which is loaned through this program. Currently there are 32 students in this program who have agreed to return to 30 rural communities in Oklahoma. Of these communities 15 are located in federally-designated health manpower shortage areas.

The principal reason the PMTC was formed in 1975 was to establish and administer a cost-sharing program for primary care and family practice internships and residencies. This is the purpose of the residency cost-sharing program. Through this program the number of primary care residency positions in Oklahoma training institutions has been increased by 90 percent since 1975. A total of 195 positions are available this year in 11 postgraduate training departments. The chart shown below illustrates the number of graduating physicians, the number of new positions created each year, the total number of first-year positions, and the percentage of residency positions to the graduating total.

Year	MD	DO	Total	New Positions	Total Positions	Percentage
1975	137	0	137	24	85	62.0
1976	139	0	139	44	129	92.8
1977	159	36	195	40	169	86.7
1978	164	56	220	40	209	95.0
1979	168	76	244	50	259	106.0
1980	176	76	252			

Physicians have done much in the past couple of years to solve many of the problems of physician manpower distribution. As a Commissioner of the PMTC, I serve along with Jack Parrish, MD, Seminole, who is Vice-Chairman of the organization, and with Billy Dotter, MD, of Okeene. Two DOs from the state also serve on this Commission, enabling physicians to be largely responsible for solving physicians' problems.

I think these are activities we can be proud of in this state.

C. S. Lewis Jr. M.D.

OKLAHOMA STATE MEDICAL ASSOCIATION

Use of the Clinical Virology Laboratory

THEODORE W. VIOLETT, MD
SUE L. MANN, MT (ASCP)

*The laboratory can be a vital force
in diagnosis and treatment of viral infections
if a virological process is considered
early in the patient's course, and the
laboratory is service oriented.*

I. Introduction

Viruses are responsible for more infections than any other class of infectious agents. Viruses are small packages of nucleic acid either as RNA or DNA, which reproduce inside living cells and code those cells to produce proteins called "Virions," which are the infectious particles. When viewed under the electron microscope they demonstrate a nucleus of nucleic acids, an outer capsid, and a surrounding envelope. They demonstrate a variety of shapes and forms under the electron microscope, and often times will show a morphology which is characteristic for a particular group of viruses.

Clinical Laboratory, Saint Anthony Hospital, Oklahoma City, Oklahoma.
Presented at Medicine Grand Rounds, Saint Anthony Hospital, March 7th,
1977.

There are three common misconceptions regarding virology which should be dealt with. The first is that virology studies are expensive. In fact, most virology evaluations can be carried out for \$50.00 or less, often times costing less than bacterial cultures and sensitivities. Second, it is commonly felt that results of viral cultures are obtained too late to be of any use during an acute illness. In fact, many viruses can be identified in four to seven days. This is less time than required for the identification of anaerobic bacteria. Third, after a virus has been identified it becomes academic since there is no specific therapy available. At the present time, this is often a valid argument. However, as new gains are made in the specific therapy of viral illnesses this will become a less significant consideration, and laboratory identification of specific viruses will become more important. Idoxuridine for example is now used in herpetic infections of the eye and central nervous system.

II. Diagnostic Methods in Virology

There are four basic methods which are used in the virology lab to identify virus species:

a) *Light microscopy of tissue* — many viral infections will produce morphologic change within infected tissues which are pathognomonic. For example, herpes simplex produces a nuclear viral inclusion which may be

seen in cells obtained from vesicles. Varicella and adenoviruses may also produce nuclear inclusions. Rabies and smallpox produce cytoplasmic viral inclusions. In these infections, light microscopic examination of infected tissue or smears may be diagnostic.

b) *Fluorescent microscopy* — antibody which is specific for a given virus may be labeled with a fluorescent dye. When tissues or smears are exposed to this dye, up-take of the antibody is indicative of the presence of that specific virus. This technique is also useful in identifying viruses which have been grown in tissue culture in two to three days. Material from that culture can then be placed on a slide and the virus identified by fluorescent labeling.

c) *Electron microscopy* — as previously mentioned, many viruses will take on a characteristic configuration on electron microscopy and can be identified by that method. The limiting factor with this technique is the amount of tissue necessary for diagnosis.

d) Serology

1. *Complement fixation* — This serologic technique is used to demonstrate either a rise or fall in titer of specific viral antibody during and following a viral infection. Samples are obtained during the acute phase of the illness, and again during the convalescent phase, ranging anywhere from ten to twenty-one days depending on the type of infection suspected. Positive diagnosis is dependent upon a four-fold rise in IgG antibody, or a four-fold fall in IgM antibody. Positive serology is the best indication of an active infection, since it not only identifies the organism, but demonstrates an immune response to that organism. However, serology is limited by the fact that a diagnosis cannot be established until the convalescent phase of the illness. Viral cultures, on the other hand, may demonstrate an organism much more rapidly, but do not prove that the virus is causing disease. The two tests are therefore best used together; the viral culture to rapidly identify the organism, and the serology to confirm that the organism was producing disease. In most cases, a rise in titer is necessary to prove a viral disease. Exceptions to this are the arboviral infections and rubella, in which any positive titer is indicative of recent disease or vaccination. In cytomegalovirus infections, identification of a positive titer of IgM antibody during the acute stage of illness

FIGURE ONE
COMPLEMENT FIXATION-POSITIVE TEST:

Step 1: Virus + ^{patient's}serum with antibody and complement → Virus + AB + complement

Step 2: Patient's serum (complement depleted) + Sheep RBC's → no lysis

is diagnostic of active disease. This is also true of rubella. Complement fixation studies are performed by mixing known viral antigens with the patient's serum, and determining the ability of the antigen-antibody reaction to fix complement. The serum is then added to sheep cells. In the presence of complement, the sheep cells would undergo hemolysis. If a viral antibody is present and has bound to specific antigens and fixed complement, there will be no complement in the serum available for lysis of the sheep cells and hemolysis will not occur. The absence of hemolysis therefore indicates a positive test. (Fig 1)

2. *Neutralization*—in tissue cultures, viruses produce a "cytopathic effect" (CPE). If antisera specific for that virus is added to the culture, a cytopathic effect will not be observed. This process is called neutralization, and will occur only if the antisera is specific for the virus which is growing in the culture. This procedure is often used to identify the Echo and Coxsackie viruses.

Blocking of CPE — some viruses, notably rubella, will not cause CPE. These viruses can be identified by their ability to block the CPE produced by other viruses. For example, rubella virus plus cells will not cause CPE. Echo virus plus cells will normally cause marked CPE. Echo viruses added to cells which have been exposed to rubella will fail to produce CPE. This blocking of CPE is the major method presently used to identify rubella virus.

Since his graduation from the University of Oklahoma College of Medicine in 1956, Theodore W. Violett, MD, has been certified by the American Board of Clinical Pathologists. In addition to his private practice he is Associate Clinical Professor of Pathology at his school of graduation. Among his medical affiliations are the American Society of Clinical Pathologists, the American Association of Blood Banks and the American Society of Histocompatibility Testing.

Virology Studies and Specimens of Choice

Clinical Syndrome and Possible Agent	Viral Serology							Viral Isolation (Acute or febrile stage only)					Comments
	Sera Specimens				Tests Indicated (performed only on paired sera)			Type of Specimens					
	acute	10- 14 day	30 day	6 wk	CF	Neut.	H-I	St	Th or N-P	Ur	CSF	Other	
I. Central Nervous System													
A. <i>Aseptic Meningitis</i>													
Adenovirus	X	X			X			X	X				
Coxsackievirus	X	X				X		X	X		X		
Echovirus	X	X				X		X	X		X		
Mumps	X	X			X				X	X	X		
Polio	X	X			X			X	X		X		
LCM	X	X			X							NA	
"Q" Fever	X		X PAT		X							NA	
B. <i>Encephalitis and Encephalomye- litis</i>													
Coxsackievirus	X	X				X		X	X		X		
Echovirus	X	X				X		X	X		X		
Herpes simplex	X	X			X			X	X		X		
Herpes zoster	X	X			X				X		X		
Polio	X	X			X			X	X		X		
Varicella	X	X			X				X		X		
EEE	X	X					X					NA	
SLE	X	X					X					NA	
WEE	X	X					X					NA	
C. <i>Post-vaccinial or Infectious Encephalitis</i>													
Mumps	X	X			X							NR	
Rubella	X	X			X							NA	
Rubeola	X	X			X							NR	
Vaccinia	X	X									X		
D. <i>Meningo- encephalitis</i>													
Coxsackievirus	X	X				X		X	X		X		
Herpes simplex	X	X			X			X	X		X		
Mumps	X	X			X				X	X			
II. <i>Respiratory System</i>													
A. General													
Influenza A, B	X	X			X				X				Seasonal
Adenovirus	X	X			X			X	X				
Cytomegalovirus	X		X	X	X							NA	
Psittacosis	X		X		X							NA	
"Q" Fever	X		X		PAT X							NA	
Respiratory syncytial	X	X			PAT X				X				Pediatrics
Parainfluenza (1-4)	X	X			X				X				Pediatrics
B. <i>Primary Atypical Pneumonia</i>													
Myc. pneumoniae	X	X	X		X							NA	
Influenza A, B	X	X			X				X				Seasonal
Adenovirus	X	X			X			X	X				
C. <i>Post-Vaccinial or Post-Infectious Pneumonia</i>													
Vaccinia	X	X										VF, LS	
Varicella	X	X			X				X				
Rubeola	X	X			X				X				

Clinical Syndrome and Possible Agent	Viral Serology							Viral Isolation (Acute or febrile stage only)					Comments
	Sera Specimens				Tests Indicated (performed only on paired sera)			Type of Specimens					
	acute	10- 14 day	30 day	6 wk	CF	Neut.	H-I	St	Th or N-P	Ur	CSF	Other	
III. <i>Fever of Unknown Origin (FUO)</i>													Seasonal
Adenovirus	X	X			X			X	X				
Coxsackievirus	X	X						X	X				
Echovirus	X	X						X	X				
Influenza A, B	X	X			X				X				
Myco. pneumoniae	X	X	X		X							NA	
"Q" Fever	X		X		X							NA	
RSMF	X		X PAT X PAT		X							NA	
IV. <i>Myocarditis and Pericarditis</i>													Seasonal
Adenovirus	X	X			X			X	X			PcFld if avail.	
Coxsackievirus	X	X				X		X	X				
Echovirus	X	X				X		X	X				
Influenza A, B	X	X			X				X				
Poliovirus	X	X			X			X	X				
V. <i>Pleurodynia</i>													Seasonal
Adenovirus	X	X			X			X	X			PIFld if avail.	
Coxsackievirus	X	X						X	X				
Echovirus	X	X						X	X				
Influenza A, B	X	X			X				X				
VI. <i>Myalgia</i>													Seasonal
Adenovirus	X	X			X			X	X				
Coxsackievirus	X	X						X	X				
Echovirus	X	X						X	X				
Herpes simplex	X	X			X			X	X				
Herpes zoster	X	X			X			X	X				
Influenza A, B	X	X			X				X				
VII. <i>Arthralgia with Rash</i>													NA
Echovirus 9	X	X				X		X	X				
Rubella	X	X			X		X						
VIII. <i>Hepatitis</i>													Isolation of agents for infectious and serum hepatitis NA
Adenovirus	X	X			X			X	X			NA	
Cytomegalov.	X		X	X	X								
Herpes simplex	X	X			X			X	X				
Mumps	X	X			X				X				
Coxsackievirus	X	X						X	X				
IX. <i>Salivary Gland</i>													NA
Adenovirus	X	X			X			X	X				
Coxsackievirus	X	X						X	X				
Cytomegalo	X		X	X	X								
Mumps	X	X			X		X 1 spec		X				
X. <i>Exanthemata</i>													NA NR NA NR
Adenovirus	X	X			X			X	X				
Coxsackievirus	X	X						X	X				
Echovirus	X	X				X		X	X				
Rubella	X	X			X		X					NA	
Rubeola	X	X			X							NR	
RSMF	X		X		X							NA	
Varicella	X	X			X							NR	

Clinical Syndrome and Possible Agent	Viral Serology							Viral Isolation (Acute or febrile stage only)					Comments
	Sera Specimens				Tests Indicated (performed only on paired sera)			Type of Specimens					
	acute	10- 14 day	30 day	6 wk	CF	Neut.	H-I	St	Th or N-P	Ur	CSF	Other	
XI. <i>Vesicular Eruption</i>													
Coxsackie A16	X	X						X				VF, LS	
Herpes simplex	X	X			X				X			VF, LS	
Herpes zoster	X	X			X							VF	
Vaccinia	X	X										VF, LS	
Varicella	X	X			X							VF	
XII. <i>Gastroenteritis</i>													
Adenovirus	X	X			X			X					
Coxsackie B	X	X						X					
Echovirus	X	X						X					
Herpes simplex	X	X			X			X					
Reovirus (1-3)	X	X						X					
XIII. <i>Genitalia and Urinary Tract</i>													
Herpes simplex (types 1, 2)	X	X			X							LS	
Lymphogranulo- ma venereum	X		X PAT									NA	
Varicella zoster	X	X			X							LS	
Cytomegalo	X		X	X	X					X			
XIV. <i>Oral Lesions</i>													
Coxsackie A	X	X										LS	
Herpes simplex	X	X			X							LS	
Herpes zoster	X	X			X							LS	
Rubeola	X	X			X							LS	
Varicella	X	X			X							LS	
XV. <i>Eye Infections</i>													
A. <i>Eyelid</i>													
Herpes simplex	X	X			X				X			ES	
Herpes zoster	X	X			X							ES	
Vaccinia	X	X							X			ES	
B. <i>Conjunctivitis</i>													
Adenovirus	X	X			X				X			ES	
Herpes simplex	X	X			X				X			ES	
Herpes zoster	X	X			X							ES	
C. <i>Chorio retinitis</i>													
Rubella	X	X			X							NA	
Varicella	X	X			X							NA	
XVI. <i>Post Perfusion</i>													
Adenovirus	X	X			X			X	X				
Cytomegalov.	X		X	X	X				X	X			
Herpes simplex	X	X			X			X	X				
Parainfluenza (1-4)	X	X			X			X	X				
Varicella-zoster	X	X			X			X	X				
XVII. <i>Congenital Defects</i>													
Cytomegalov.	X		X	X	X					X			
Herpes simplex	X	X			X				X				
Mumps	X	X			X				X				
Rubella	X	X			X							NA	

Clinical Syndrome and Possible Agent	Viral Serology							Viral Isolation (Acute or febrile stage only)					Comments
	Sera Specimens				Tests Indicated (performed only on paired sera)			Type of Specimens					
	acute	10- 14 day	30 day	6 wk	CF	Neut.	H-I	St	Th or N-P	Ur	CSF	Other	
XVIII. <i>Perinatal Disease</i>													
Coxsackie B	X	X						X	X				
Echovirus	X	X						X	X				
Herpes simplex	X	X			X				X				
XIX. <i>Insect-Borne Disease</i>													
A. <i>Encephalitis</i>													
EEE	X	X					X					NA	
SLE	X	X					X					NA	
WEE	X	X					X					NA	
Other arbovirus	X	X										NA	
B. <i>Rickettsial Disease</i>													
"Q" Fever	X		X PAT									NA	
RMSF	X		X PAT									NA	
Rickettsialpox	X		X PAT									NA	
Rickettsia typhi	X		X PAT									NA	

CF . . . Complement Fixation Test

Neut . . . Viral Neutralization Test

H-I . . . Hemagglutination Inhibition Test

St . . . Stool or rectal swab

Th . . . Throat swab or throat washing

N-P . . . Nasopharynx

Ur . . . Urine

CSF . . . Cerebrospinal fluid

Pl.Fld . . . Pleural fluid

Pc.Fld . . . Pericardial fluid

PAT . . . 30-day serum collected 2 weeks
post-antibiotic therapy

VF . . . Vesicular fluid

LS . . . Lesion swab

ES . . . Eye swab

NA . . . Not available

NR . . . Not recommended

3. *Hemagglutination Inhibition* — many viruses will produce agglutination of red cells in cell cultures. This is especially true of the myxoviruses and paramyxoviruses (influenza and parainfluenza). By adding antiserum, which is specific for the virus in the culture, hemagglutination will be inhibited.

In summary, viral cultures may result in rapid identification of infecting organism, but do not prove that the organism identified is actually causing disease. Serology, on the other hand, will demonstrate that an organism is in fact producing disease, but the information may only become available during the convalescent stage of the illness. The virology laboratory is used most effectively when both studies are done concomitantly. With viral cultures, 50% of the viral organisms can be positively identified within four days. Seventy-three percent of viruses can be identified within seven days. The error in identification is less than five percent. These statistics can be greatly improved upon if clinical signs and symptoms are correlated with the viral isolate.

III. Types of Viral Isolation

From two to three types of cell lines may be used for viral isolation. In general, a cell line is selected which will support growth of a wide spectrum of viruses. One primary cell line, monkey kidney cells, will grow such viruses as influenza, parainfluenza, mumps, and adenovirus. Also a continuous cell line such as HeLa or Hep-2 cells may be used to supplement a primary cell line. These represent continuous lines of malignant cells, and are less sensitive than monkey kidney cells. A diploid cell line may also be used, such as Wi-38, which represent human embryonic lung. Such viruses as cytomegalovirus, rhinovirus, and respiratory syncytial viruses may be grown on this type of media. Most virology labs will use from two to three different cell lines. A combination of these groups of cell lines offers a wide range of sensitive techniques, which will allow growth of most common viruses. As mentioned, the CPE produced by a virus in these cultures may be diagnostic and allow early preliminary identification of the virus.

IV. Physician Use of the Virology Laboratory

The turn-around time for viral cultures is short enough to make it practical for clinicians to use the virology laboratory for identification of viral infections. The physician can use the virology laboratory most effectively if he knows what specimens need to be collected for a given infection, and what methods of collecting, preserving, and transporting of specimens are necessary. Most viruses are very susceptible to freezing, and specimens should not be frozen. They should be refrigerated and shipped on wet ice, but not on dry ice. Many viruses are also very susceptible to drying, and should therefore be shipped in an appropriate container. They are also susceptible to altered pH, especially acid pH, and are protected by media containing protein. It is also important to include clinical information about the patient since this can be used in correlation with the cultures to lead to more rapid identification of the organism. The ideal time for the collection of the viral specimens is during the first three days of the active illness. The types of specimens which should be collected for a given type of illness are shown in the table. For example, in aseptic meningitis, specimens of stool, throat, and spinal fluid should be obtained, as well as serum for serologic studies. For lesions involving the skin and mucous membranes, vesicle fluid and throat swabs should be obtained.

V. Common Viral Infections

a) *Picornaviruses* — this group of viruses includes the enteroviruses and the rhinoviruses. The enteroviruses include polio, Coxsackie, and echoviruses, while the rhinoviruses are associated with the common cold. The Coxsackie B viruses are common causes of myocarditis. The echoviruses are transient inhabitants of the gastrointestinal tract. They are extremely small, have an RNA core, and are resistant to ether. Ninety percent of patients with aseptic meningitis and a skin rash will have an echovirus infection.

b) *Myxoviruses* — these are large RNA viruses including the orthomyxoviruses, or influenza A, B and C, and the paramyxoviruses or parainfluenza. Respiratory syncytial virus is also in this group. This group of viruses may produce pharyngitis, coryza, croup, or influenza. Complement fixation is used to separate influenza into subtypes A, B and C. Subtypes of these groups are identified by hemagglutination inhibition.

Listed in the table are the clinical syndromes with classes of viruses which could be the causative agents. Types of specimens needed for viral isolation as well as serological tests are detailed. □

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Health Services Delivery To Prostatic Cancer Patients

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An attempt is made to study differences in health care delivery to prostatic cancer patients by examining the relations among the variables of age, race, degree and specialty of primary physician, distance to care, stage and symptoms at diagnosis, and number of tests performed.

I. Introduction and Methods

During 1969-1971, an attempt was made to identify and collect information on all Oklahoma men who were hospitalized in 1966-1968 with a clinical diagnosis of prostatic cancer. This information was obtained from the hospital records of these men. Over two hundred hospitals are located in Oklahoma and in the portions of neighboring states adjacent to Oklahoma. Cooperation of these institutions was requested and only two small hospitals declined to participate in the study. Nurse-

abstracters were trained to abstract the required information from patient charts. Periodically, several abstracters would abstract the same chart in order to maintain uniformity of data collection among the abstracters. In all, 2,244 cases were found and abstracted.

Part of the information collected on these cases relates to various aspects of health services delivery. This report deals with some of the more elementary determinants of health care; a later report will consider the effect of the geographic distribution of physicians of various specialties, particularly urology, on the delivery of health services to prostatic cancer patients. The variables considered here are: age at diagnosis, race, the degree of the patient's physician (MD or DO), the specialty of the patient's physician, stage of disease at diagnosis, primary symptoms reported at diagnosis, distance to care, and number of diagnostic procedures reported done on the patient.

The definition of these last two variables needs clarification. The abstracters were requested to determine whether each patient had traveled "less than 20 miles," "20-49 miles," "50-100 miles," or "more than 100 miles" to (1) the facility at which diagnosis of the malignancy occurred, (2) the primary physician, or (3) a consulting physician. For this report we

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have chosen to divide the cases into two groups on the basis of these distances: those men for whom one or more of these distances was more than 100 miles and those men for whom none of the distances was more than 100 miles. For ease of identification, these groups will be called the distant and non-distant groups, respectively.

Abstracters were also requested to collect the results of many different diagnostic procedures for each patient. Unfortunately, the hospital charts were such that results of some tests were unobtainable. In some cases, it was not possible to determine with certainty whether particular tests had been done or not. After preliminary examination of the data, it was decided to consider first only 26 of the procedures for which an attempt was made to collect information. These tests were selected because it was possible to determine, for most of the cases, whether the procedure had been done or not and what the results of the tests were, if done. For this report, only the total number of these 26 tests which were performed on each patient will be considered.

Perhaps the most difficult problem encountered in the analysis of this data is the one alluded to above — missing data. Despite all efforts of the investigators and abstracters, this problem is inevitable, due to the data source used. The analyses reported here were done by including in each table only those cases for which all pieces of information under consideration were available. This decision allowed a much more clean and concise analysis than might otherwise have been possible.

II. Age, Race, Degree and Speciality of Physician, and Distance to Care

Table I gives the distribution of the cases by age and race. No patient was less than 40 years old nor more than 99 years old at diagnosis.

TABLE I
AGE AT DIAGNOSIS BY RACE

Age at Diagnosis	Race			Total	
	White	Black	Indian	Number	%
40-49	14	3	1	18	0.9
50-59	105	11	0	116	5.7
60-69	545	60	9	614	30.1
70-79	751	95	11	857	42.0
80-89	328	52	7	387	19.0
90-99	42	6	1	49	2.4
Total	1785	227	29	2041	

Four men whose race was reported as "other" have been omitted from the table. There were no statistically significant differences in the age distributions within the three racial groups. There was also no significant difference in the age distributions in the distant and non-distant groups.

There was no significant difference in the distribution of the degree of the primary physician among the three racial groups. However, there was a statistically significant difference in the distribution of the specialty of the primary physician among the three groups. These data appear in Table II. The chief difference is in the percentage of each race who were treated by a urologist. Although a smaller percentage of whites were treated by physicians in general practice than the other races were, there were no statistically significant differences in the distributions when men seeing urologists were omitted. These differences in distributions are perhaps the result of socioeconomic differences in the races.

Examination of the distant and non-distant groups showed that there is no significant difference in the distribution of the races within these two groups. The distribution of the de-

TABLE II
SPECIALTY OF PRIMARY PHYSICIAN BY RACE

Specialty of Primary Physician	Race						Total	
	White		Black		Indian		Number	%
	Number	%	Number	%	Number	%		
General Practice	447	28.7%	77	35.6%	9	39.1%	533	29.7%
Medicine	180	11.6	28	13.0	2	8.7	210	11.7
Surgery	158	10.8	22	10.2	4	17.4	194	10.8
Urology	724	46.5	86	39.8	4	17.4	814	45.3
Other	39	2.5	3	1.4	4	17.4	46	2.6
Total	1558		216		23		1797	

TABLE III
SPECIALTY OF PRIMARY PHYSICIAN BY DISTANCE GROUP

Specialty of Primary Physician	Distance Group				Number	Total %
	Number	Distant Group %	Number	Non-distant Group %		
General Practice	36	18.8%	510	30.1%	546	28.9%
Medicine	12	6.3	211	12.4	223	11.8
Surgery	23	12.0	177	10.4	200	10.6
Urology	114	59.7	752	44.3	866	45.9
Other	6	3.1	46	2.7	52	2.8
Total	191		1696		1887	

gree of the primary physician also was not statistically different in the two groups. The distribution of the specialty of the primary physician did differ significantly for these two groups. A higher percentage of the men who traveled more than 100 miles for care were treated by urologists and a smaller percentage were treated by physicians in general practice. Table III shows these differences. Even when the men treated by urologists are omitted from consideration, the two distributions are significantly different. In this case, it is somewhat surprising to find the greatest difference in percentages occurring in the men seen by surgeons — 29.9% of the distant group versus 18.8% of the non-distant group. This recasting of Table III caused the percentage of men being treated by physicians in general practice to be less disparate — 46.8% versus 54.0%. The difference in percentages of men seeing physicians specializing in medicine was essentially unchanged.

III. Stage at Diagnosis

No statistically significant differences were found in the distribution of ages among stages or in the distribution of stages in the distant and non-distant groups.

Tables IV and V show the distribution of

TABLE IV
STAGE AT DIAGNOSIS BY DEGREE OF PRIMARY PHYSICIAN

Stage at Diagnosis	Degree of Primary Physician				Total	
	MD		DO			
	Number	%	Number	%	Number	%
I	293	19.3%	15	18.8%	308	19.3%
II	769	50.7	29	36.3	798	50.0
III	124	8.2	5	6.3	129	8.1
IV	330	21.8	31	38.8	361	22.6
Total	1516		80		1596	

stages among MD-DO groups and among the various physician specialties. The difference in distributions between degree groups seems to be primarily due to the high percentage of stage II patients seen by MD's and the high percentage of stage IV patients seen by DO's. The differences in the distribution of stages among specialty groups, on the other hand, seem to be due to the high percentage of stage II cases seen by urologists and by surgeons. Analysis of both Tables IV and V, with cases seen by urologists omitted, still shows significant differences, although they are less pronounced. The high percentage of stage II cases seen by MD's is a result of the high percentage of stage II cases seen by urologists, since most of these patients see MD urologists.

Analysis of Table VI indicates that the distributions of stages in each of the racial groups are significantly different. The primary differences appear to be the high percentage of whites with stage II disease and the high percentage of blacks with stage IV disease. In-

TABLE V
PRACTICE OF PRIMARY PHYSICIAN BY STAGE AT DIAGNOSIS

Practice of Primary Physician	Stage at Diagnosis				Total
	I	II	III	IV	
General Practice	# 68 % 16.5%	166 40.2%	22 5.3%	157 38.0%	413
Medicine	# 32 % 17.6%	81 44.5%	15 8.2%	54 29.7%	182
Surgery	# 28 % 16.2%	91 52.6%	4 2.3%	50 28.9%	173
Urology	# 161 % 21.8%	419 56.8%	77 10.4%	80 10.9%	737
Other	# 6 % 18.8%	11 34.4%	4 12.5%	11 34.4%	32
Total	295 19.2%	768 51.1%	122 7.9%	352 22.9%	1537

TABLE VI
STAGE AT DIAGNOSIS BY RACE

Stage at Diagnosis	Race						Total	
	White		Black		Indian			
	Number	%	Number	%	Number	%	Number	%
I	300	20.6%	27	13.0%	2	7.7%	329	19.5%
II	744	51.2	85	41.1	17	65.4	846	50.2
III	130	8.9	9	4.3	2	7.7	141	8.4
IV	279	19.2	86	41.5	5	19.2	370	21.9
Total	1453		207		26		1686	

dians also had a high percentage with stage II disease; however, this could be due to the small number of Indians observed, rather than to the actual occurrence in the Indian population. Since a high percentage of whites was seen by MD urologists, it seems likely that the observations of high percentages of stage II cases among the whites, among cases being seen by urologists, and among cases being seen by MD's are related.

IV. Symptoms at Diagnosis

There were no statistically significant differences in the distribution of symptoms at diagnosis among the three racial groups or between the distant and non-distant groups.

Initial analysis of Table VII indicates that there is a significant difference in the distribu-

tion of symptoms between the two degree groups. The principal difference is in the percentage of patients reporting urinary obstruction or urinary tract infection. Closer examination of the data reveals that, of the 938 men reporting these symptoms and being treated by an MD, 542 were being treated by a urologist. Analyzing Table VII after elimination of the cases seen by urologists does not show a significant difference in the distributions. On the other hand, the distributions of symptoms among the various specialty groups, as seen in Table VIII, show significant differences, both with the men being treated by urologists included and with these men eliminated. It is not surprising to find that men whose chief symptom is urinary retention seek a urologist for treatment. It is, however, somewhat surprising to find that the percentage of cases diagnosed

TABLE VII
SYMPTOMS AT DIAGNOSIS BY DEGREE OF PRIMARY PHYSICIAN

Symptoms at Time of Diagnosis	Degree of Primary Physician				Number	%
	MD		DO			
	Number	%	Number	%		
Urinary obstruction or urinary tract Infection	938	55.7%	41	47.1%	979	55.2%
Hematuria	90	5.3	6	6.9	96	5.4
Complete urinary retention	262	15.5	11	12.6	273	15.4
GU pain	58	3.4	6	6.9	64	3.6
Pain in other body regions	131	7.8	15	17.2	146	8.2
Incidental diagnosis as a result of examination or treatment for other diseases	206	12.2	8	9.2	214	12.1
Total	1685		87		1772	

TABLE VIII
SYMPTOMS AT TIME OF DIAGNOSIS BY SPECIALTY OF PRIMARY PHYSICIAN

Symptoms at Time of Diagnosis	Specialty of Primary Physician								Total	
	General Practice		Medicine		Surgery		Urology			
	Number	%	Number	%	Number	%	Number	%	Number	%
Urinary obstruction or urinary tract infection	193	41.6%	88	45.3%	85	45.0%	550	68.5%	916	55.1%
Hematuria	22	4.7	10	5.2	11	5.8	48	5.9	91	5.5
Complete urinary retention	82	17.7	20	10.3	30	15.9	126	15.5	258	15.5
GU pain	21	4.5	4	2.1	9	4.8	28	3.4	62	3.7
Pain in other body region	88	19.0	22	11.3	24	12.7	4	0.5	138	8.3
Incidental diagnosis as a result of examination or treatment for other diseases	58	12.5	50	25.8	30	15.9	58	7.1	196	11.8
Total	464		194		189		814		1661	

as a result of examination or treatment for other disease by physicians specializing in internal medicine is much higher than the corresponding percentage for physicians in general practice or in surgery. Data from this study cannot shed light on why this difference occurs. However, since 90% or more of prostatic cancer cases can be diagnosed by digital palpation via the rectum, it would be interesting to know whether physicians in general practice and those in internal medicine use this diagnostic technique to the same extent.

V. Number of Tests Performed

Perhaps the most interesting variable reported on here is the number of tests performed on a patient, since this variable is related to both quality of care and cost of care.

Table IX shows the distribution of the number of tests done within racial groups. These distributions differed significantly. The most striking differences are among the blacks, who have a lower percentage than the other races in the 0-4 category and a higher percentage in the 15-or-more category. In an effort to examine these differences further, Table X, which relates race to the size of hos-

pital where treatment was received, was constructed. In this table, hospital size was measured by the number of beds in the hospital. Analysis of Table X yields a significant chi-squared value. Median hospital size for each racial group was computed, using the data from which Table X was compiled. The median sizes found were: whites, 248 beds; blacks, 311 beds; and Indians, 212 beds. These median sizes point out the differences seen in Table X. A partial explanation of the results of Tables IX and X might lie in the fact that most Oklahoma blacks tend to have low socioeconomic status. As a result of this, these men might seek care at tax-supported institutions, such as Veterans Administration and county welfare hospitals. Such hospitals tend to be quite large and, in some cases, are teaching hospitals. One might expect that physicians at teaching hospitals would order more tests done on patients than at other hospitals, simply because of the teaching being conducted. Further study of just which hospitals provided care for which patients is planned.

Tables XI and XII examine the relation between the number of tests done and the degree and specialty of the primary physician. Analysis of both of these tables yielded significant chi-squared values. It appears that men being treated by DO's tend to undergo slightly

TABLE IX
RACE BY NUMBER OF TESTS DONE

Number of Tests Number	Race						Total Number %	
	White Number	%	Black Number	%	Indian Number	%		
0- 4	284	15.2%	23	9.7%	6	19.4%	313	14.7%
5- 9	221	11.8	25	10.6	6	19.4	252	11.8
10-14	933	49.9	114	48.3	13	41.9	1060	49.6
15 or more	431	23.1	74	31.4	6	19.4	511	23.9
Total	1869		236		31		2136	

TABLE X
NUMBER OF BEDS IN HOSPITAL WHERE TREATMENT WAS RECEIVED BY RACE

Number of Beds in Hospital Where Treat- ment was Received	Race						Total	
	White		Black		Indian			
	Number	%	Number	%	Number	%	Number	%
Less than 50	168	9.2%	22	9.4%	3	9.4%	193	9.3%
50-99	200	11.0	9	3.8	5	15.6	214	10.3
100-199	346	19.0	34	14.5	5	15.6	385	18.5
200-299	403	22.1	49	20.9	8	25.0	460	22.1
300-399	171	9.4	26	11.1	3	9.4	200	9.6
400 or more	532	29.2	94	40.2	8	25.0	634	30.4
Total	1820		234		32		2086	

TABLE XI
NUMBER OF TESTS DONE BY DEGREE
OF PRIMARY PHYSICIAN

Number of Tests Done	Degree of Primary Physician				Total	
	MD		DO			
	Number	%	Number	%	Number	%
0-4	148	9.6%	3	3.8%	151	9.4%
5-9	176	11.5	14	17.9	190	11.8
10-14	820	53.4	37	47.4	857	53.1
15-19	358	23.3	19	24.4	377	23.4
20+	33	2.1	5	6.4	38	2.4
Total	1535		78		1613	

more tests. Why this should be so is not clear; however, a partial explanation for the differences seen in Table XI might be the fact that apparently, as seen in Table XII, urologists tend routinely to order 10 to 14 tests for their patients. Since most patients in the study who saw urologists were seeing MD urologists, this might account for the high percentages in this category in Table XI. It is interesting to note that the percentage of men seeing physicians in general practice and receiving fewer than 10 tests is much higher than for the other practice specialties. Why this should be so is not clear; however, it is conjectured that perhaps physicians in general practice tend to practice at hospitals which are smaller and/or rural and which, therefore, have more limited testing facilities. Further study of this phenomenon is planned.

In order to examine the number of tests done in relation to the distance traveled for care, Table XIII was constructed. Analysis of this table gave a significant chi-squared value. It appears from Table XIII that men in the distant group underwent more tests than other men. This is somewhat surprising, since a high

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percentage of the distant group was treated by a urologist and since urologists did not tend to order large numbers of tests.

TABLE XII
SPECIALTY OF PRIMARY PHYSICIAN BY NUMBER OF TESTS DONE

Specialty of Primary Physician		Number of Tests Done					Total
		0-4	5-9	10-14	15-19	20+	
General Practice	#	71	63	215	89	9	447
	%	15.9%	14.1%	48.1%	19.9%	2.0%	
Medicine	#	14	11	93	59	3	180
	%	7.8%	6.1%	51.7%	32.8%	1.7%	
Surgery	#	10	26	89	39	4	168
	%	6.0%	15.5%	53.0%	23.2%	2.4%	
Urology	#	45	85	402	176	16	724
	%	6.2%	11.7%	55.5%	24.3%	2.2%	
Other	#	4	3	21	9	2	39
	%	10.3%	7.7%	53.8%	23.1%	5.1%	
Total	#	144	188	820	372	34	1558
	%	9.2%	12.1%	52.6%	23.9%	2.2%	

TABLE XIII
NUMBER OF TESTS DONE BY DISTANCE GROUP

Number of Tests Done	Distance Group				Total	
	Number	Distant %	Number	Non-distant %	Number	%
0-4	39	15.8%	274	14.5%	313	14.7%
5-9	26	10.5	226	12.0	252	11.8
10-14	105	42.5	955	50.6	1060	49.6
15 or more	77	31.2	434	23.0	511	23.9
Total	247		1889		2136	

The differences seen in Table XIII may be simply the result of the physician's realizing that these men have traveled a great distance and wanting to be sure that all necessary diagnostic information has been obtained before the patient is discharged.

VI. Summary

In attempting to assess differences in health care delivery to prostatic cancer patients, the relations among the variables of age, race, degree and specialty of primary physician, distance to care, stage and symptoms at diagnosis, and number of tests done have been examined.

Age does not seem to be much of a factor in patient care. Race, on the other hand, does appear to be a determinant of care. On a percentage basis, more blacks are diagnosed in later stages; fewer blacks than whites see specialists, particularly urologists; and more blacks go to larger hospitals and undergo more diagnostic tests. It seems likely that these observations are interrelated and possibly due to the fact that many blacks suffer from low socioeconomic status.

Not surprisingly, the training and specialty of the primary physician are significant variables in patient care. It is also not surprising that urologists play an important role in the care of men with this malignancy.

A racial difference was observed, related particularly to the number of men seeing urologists. This is possibly socioeconomic in origin. Men who travel more than 100 miles for care tend to consult urologists more than

physicians in other specialties. Moreover, men who are under care of urologists tend to be diagnosed in earlier stages. To some extent this is expected, since stage I disease must be diagnosed during treatment for another condition; however, why urologists should treat a high percentage of stage II patients is unclear. A partial explanation may lie in those symptoms which lead men to consult a urologist. Finally, the number of tests administered to a patient is related to the degree and specialty of the physician. This difference may be partially related to size of hospital, as well as stage and symptoms at diagnosis.

It is somewhat surprising to find that distance traveled for care is not a strong factor in that care. The fact that men who travel for care tend to see specialists, particularly urologists, and to undergo more diagnostic tests would appear to be well-considered action, based on the travel time required. □

Acknowledgements

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P.O. Box 26901, Oklahoma City, Oklahoma 73190.

Information Transfer in Medicine and Maintenance of Professional Competence

STEWART WOLF DAY LECTURE

April 15, 1977

Oklahoma University Health Sciences Center
Oklahoma City, Oklahoma

ROBERT M. BIRD, MD, DIRECTOR*
HAROLD M. SCHOOLMAN, MD,

The question is: How can an information service be devised that is responsive to a clinician's problem at the time he has the problem?

The closing remarks of Stewart Wolf, MD, are appended.

It is a privilege and an honor to have been asked to give this Stewart Wolf lecture. A privilege to have the opportunity to acknowledge publicly Stewart Wolf's many contributions to medicine and medical education. An honor to have been asked to try to convey to you some of the thoughts which Bob Bird might have brought had he been able to fulfill his commitment to give this lecture.

I've been told that you referred to Bob as the "Gray Eagle," an endangered species. That wise, kind, gentle, witty man who was so intolerant of hypocrisy and pomposity, and so demanding in the standards he set for himself —

he may not have been the last, but he was surely one of the very best. I usually referred to him as "Irving" for reasons that are well known in this environment. "Irving" loved this community — he loved this campus — and he was extraordinarily pleased to have been asked to give this lecture. I know because he came to me shortly after receiving the invitation to tell me about it, and to ask what I thought he should talk about.

It was mid-afternoon, and I suggested that we retire to his apartment to discuss the matter. This had become a custom with us when we wanted to get away and work uninterrupted. We moved to his apartment where I took off my shoes, loosened my tie, put my feet up on the table, and accepted the mild libation which he offered and insisted upon referring to as a "toddy." This was a term which always bothered me for it held for me a medicinal connotation — conjured up a vision of a hot, sticky, sweet liquid that was intended to be therapeutic rather than prophylactic. "Irving," on the other hand, preferred to pace, sitting down only long enough to make some notes or summarize our position of the moment. We were comfortable — we enjoyed working together in this manner.

"Where should we start?" he asked.

"Let's start where we always start — with a statement of the problem. That's where we've

*Dr Bird died on December 30th, 1976; Dr Schoolman gave the lecture.

been trained to start — that's what we know how to do — so, what is the problem that you want to deal with?"

"What we're concerned with is physicians' performance. There are reasonable data and considerable agreement that current physician performance in taking care of patients is not always optimal nor consistent with the best available information. This lack of applying the best available information does result, in some significant number of instances, in either increased morbidity, mortality or cost to the patient."

"Are you suggesting that the problem is purely one of information transfer, and that the reason physician behavior is sometimes inadequate is that they do not know better?"

"No, if that were the case, the problem would be much simpler — what evidence there is suggests the contrary. As you know, Osler Peterson¹ as far back as 1956 demonstrated that, if anything, the overall quality of patient care was diminished by educational efforts. Disregarding the negative aspect of this result, the fact that it has not influenced or altered behavior has been confirmed by a number of investigators.^{2, 3} Clearly, the mere provision of information (even when it can be demonstrated by pre- and post-testing that the physician has acquired the information of concern) is in and of itself, although necessary, not sufficient to assure quality performance. Indeed, as Senior⁴ has pointed out, the situation is considerably more complicated. Clearly, information is a requisite for knowledge, but it is not sufficient to assure knowledge nor is the presence of knowledge adequate to assure competence if by competence is meant the ability to apply knowledge in a problem-solving mode. Nor is the presence of competence adequate to assure the quality of performance. In this equation which starts with information and moves through knowledge, competence, and then performance, at each step of the way there is the necessity for the preceding activity. Although the preceding activity is necessary, it is not sufficient to guarantee the subsequent steps. In short, there are additional ingredients. What physicians do is not necessarily determined by what they know. Rather, what they do is determined by a variety of other factors. These relationships are complicated. Data do exist on the relationship between information

and knowledge and between knowledge and competence. Clearly, there are people who have knowledge, but are unable to use it in a problem-solving mode. Unfortunately, there are very little if any data on the relationship of competence to performance. There are very little data anywhere as to why physicians do what they do. There are, of course, theories, most of which rely on some sort of imperative—the economic imperative—the social imperative—the technologic imperative. Physicians do what they do because it is economically necessary to do what they do. They intervene because they are paid for intervention — they are not paid to prevent intervention. It surely cannot be argued at this time that the persistent prescription of antibiotics for viral respiratory diseases represents an absence of knowledge or a failure of the information transfer system. There cannot be a physician who lives and breathes and reads the Reader's Digest who is not aware of the hazards and folly of this type of procedure. Performance here is not reflecting competence or knowledge — what is it reflecting? Some people say that the physician gets paid for giving the shot and, therefore, he gives it. Others say that more important than the fee he gets for giving the shot is the fact that if he does not give it he will lose not only the income from the shot but the patient as well. Here then we have a mixture of the economic imperative and the social imperative as a reflection of patient expectation and demand. The argument is offered that even if the physician refused to give the shot on the basis that he knew it was wrong, surely the patient would find a physician who would give him the shot, so the patient would not even then be protected. Another example of the theory of economic determinism is the concept of so-called defensive medicine. To protect against malpractice, doctors do a number of unnecessary procedures to guarantee they will not be guilty of an error of omission. Somehow, there has grown up a legal theory that errors of omission are more reprehensible than errors of commission. Finally, there is the technological imperative notion that if you introduce a technology it demands to be used whether the technology be a CAT scanner or a surgeon.

"In spite of the presence of these theories, and in spite of the data which demonstrate reasonably well that performance is not determined by information, knowledge nor competence, we continue to hold to the faith that

the way to improve the quality of performance is through education. And by education we largely mean information transfer. Indeed, we support making such education mandatory either as part of relicensure or recertification. And by such programs we mean increased attempts at the transfer of information. The number of such programs has more than doubled in the last three years now reaching the incredible total of almost 6,000.⁵ The presence of increasing numbers of laws for relicensure and recertification will surely continue to promote such activities. Yet, it is clear from the data, and from our experience of the last 30 years, that there is little reason to believe that

The late Robert M. Bird received the MD degree from the University of Virginia. In 1952 he transferred from the New York Hospital, Cornell Medical Center with Professor Stewart Wolf to the Department of Medicine, University of Oklahoma. Dr Bird developed the Hematology Section, became Professor of Medicine, and left an indelible mark while Associate Dean of Planning, 1965-70, and Dean of the Medical College, 1970-74.

He served as governor for Oklahoma of the American College of Physicians, and was a member of many societies, including the American Society of Hematology, Central Society for Clinical Research, and the Oklahoma County, State and American Medical Associations. From 1974 until his sudden death on December 30, 1976, Dr Bird was Director of the Lister Hill Center, National Library of Medicine.

Harold M. Schoolman, MD, graduated from the University of Illinois College of Medicine in 1950 and served an internship and residency in medicine and fellowship in hematology at the Cook County Hospital. Later he received a special fellowship from the National Institutes of Health to serve in the Department of Medical Statistics, London School of Hygiene and Tropical Medicine in England. Dr. Schoolman belongs to many medical societies including the American College of Physicians and the Central Society for Clinical Research, and was a member of the Advisory Committee on Graduate Education of the American Medical Association. He was formerly Chief of the Education Service for the Veterans Administration and currently is Deputy Director for Research and Education of the National Library of Medicine, Bethesda, Maryland.

the quality of performance will, indeed, be significantly influenced by these factors which may be necessary but are surely not sufficient. If the purpose of continuing medical education is to alter physician performance for the benefit of the patient then surely the most pressing problem in continuing education — the one for which no data exist — is an understanding of why physicians do what they do.

"Irving, I don't disagree with you, but the National Library of Medicine is not a very good power base to attack that question. We might be able to support a study or two especially designed to elucidate methodology to gain data in that area, but our experience is in information handling. If we are going to work on this problem at NLM, I think we must relate it to the things that we do well and the things that we can influence."

"No problem," he replied. "It does not even matter whether you accept the thesis; it does not even matter what thesis you choose to adopt. No matter how you approach the solution to this problem, or what you conceive to be the problem, you have to start with an information base. Our existing information base is handled in a way which tends to impede its effective use, especially for clinical application. A clinician faced with an immediate clinical problem asks our information base a question. What he gets is a citation to an article or articles located in some library which may contain information from which the answer to his question might be derived or inferred. What we need is an information system that is directly responsive to the clinician's questions. We know that the clinician learns best, and is much more likely to have information affect his behavior if it is information that is responsive to a clinical problem at the time that he has the problem. What we need, if you like, is a desk-top information service that will respond to the clinician's problem with an answer which he understands and is relevant at the time he asks the question."

"Irving, that sounds like you are describing a textbook."

"No, a textbook would not meet those characteristics. In the first place, by the time a modern textbook is published it is already out of date. Secondly, it is an idealized presentation of a large subject so that the typical case that appears in any textbook does not, in fact, exist anywhere, but is the total summation of all the atypical cases that we encounter

ordinarily in real life. A textbook is written with a minimum of redundancy so that the inter-relationship of ideas appears only once in full development on some page. If you look up some subject you frequently have to read page 27 to find what you are looking for which refers to page 324 and thus go back and forth. A textbook is not a novel — nobody reads a textbook — that is, from cover to cover. It has another serious retrieval deficit, namely single-term indexing. When you look at the index of a textbook you really have a very simplistic means of information retrieval. The inability to apply Boolean logic to the retrieval system makes it very difficult to readily achieve the specificity of response necessary. Finally, the textbook usually fails to give any sense of conviction of any of its statements. It may give citations and references for some statements, but it also makes many statements without validation or reference to the basis for such statements, or indication of the confidence with which the statements are made. It is the author himself reflecting in essence one man's opinion."

"All of those deficiencies, Irving, are correctable — we're information specialists, and it is within our expertise to resolve each of the issues you've identified. Whether it is practicable to do so remains a question, but each of the problems could be resolved."

"Right, but we have to reduce the dimensionality to something realistic, and we have to decide on a tactic."

"Suppose we begin with the notion that we are trying to deal with those information bits which might be of importance to the outcome if they were applied by the clinician. The vast majority of clinical encounters can be accounted for by a relatively small number of entities. We do not have to conceive of reworking all of medical knowledge. We could make a big dent in this, probably on the order of covering 80-85% of the clinical encounters, if we did as few as 40 or 50 entities. The second consideration is whether or not anything about the subject is really known. That is, is anything known about the subject which would make a difference in mortality, morbidity, or even cost? The third thing is whether anything is going on in that subject that is worth all this effort."

Following much discussion of these points, and after another "toddy" or two, we started

talking about viral hepatitis as a possible subject area to model the information process. The first question was, from what source was a synthesis available that could be used to begin this process? We know, from a quick search of the MEDLARS data bases, that in the last eleven years there have been more than 18,000 articles published on the subject of hepatitis. Even if only half are on the subject of infectious hepatitis, clearly, we were not about to read 9,000 articles, and in effect start from scratch. What then were the syntheses that were available that would give us a starting point? We had some preconceived notion that this function of synthesis and analysis in the sense of data reduction was not a well-supported activity, and was not well done. We looked at many textbooks and found several excellent beginning syntheses and two symposia. We called twelve professors of gastroenterology, hepatologists in universities around the country. All but one, within the last year, had prepared a synthesis on this subject for his student teaching or other purposes. We looked at NIH grant proposals in the area of hepatitis — 30% of them contained in-depth reviews and syntheses as part of the grant application. We looked at other agencies — the Center for Disease Control had published a series of hepatitis surveillance reports plus several summary syntheses. It was apparent that not only was there no shortage of syntheses, but rather that the magnitude of effort on syntheses was so great that, as a side issue, if it could be organized and harnessed, the savings in that enterprise alone might be astronomical — so great, indeed, as to support the whole undertaking.

So, we set about to construct, as a model process, something in viral hepatitis. Dr Lionel Bernstein had joined us and had assumed responsibility for the project. He has now created a restructuring of the information on viral hepatitis in a manner which identifies, under major subheadings, each important concept — then follows with a successive series of statements of increasing specificity about the major subheadings, and gives references to the most specific statement to justify the conclusion that is written. We are learning it can be done. We are learning it can be done even more easily than we thought because, in point of fact, lots of people are already engaged in this process in an uncoordinated fashion.

The next problem is maintaining the cur-

rency of such a *data bank*. One could link it to INDEX MEDICUS, retrieve new publications every month that relate to any subject area within this *data bank*, and have a panel of experts review the new data. Further, one could invoke modern communication technology and develop a computer conferencing technique for our experts, or for that matter, anybody else who wanted to bring up an entry correction for consideration by the expert group. Entry would be made via the computer which would print for all those who were taking part. The experts could argue about it, over the computer, without ever meeting until they come to a consensus that — “yes, statement 27B ought to be changed in the following manner as a result of new evidence.” We could then update statement 27B in a matter of minutes.

“What kind of products do we have in mind that could be derived from such a data bank? One simplistic thing that we have done is derive 120 questions that seem to be of some interest starting with fairly simple ones; such as, what is viral hepatitis? and going to highly sophisticated ones like, what is the evidence that gamma globulin would be of benefit if given to a persistent carrier of surface antigen in hepatitis B? We can relate each of these 120 questions to specific statements that are made within this *data bank*, and we can do it at varying levels of sophistication — by sophistication is meant detailed specificity. It would be a simple matter to add questions that had not been entered so that one could rapidly cover most of the questions that would be asked. We could use the same *data bank* as the basis for development of educational materials of all kinds. Indeed, if one wanted to view this *data bank* as a chapter in a textbook of medicine, we could translate it into a teaching mode — or even a self-instructional teaching mode — at any level so that we could learn its contents through the use of computer-mediated instruction. We could provide the current information in the *data bank* through teaching materials in any media. We could also, with perhaps some modifications, help administrators and researchers identify lacunae in our knowledge. We could enhance the relevancy of the research dialogue by some expanded use of this type of approach to the handling of information.

From a model processing point of view, there are a number of problems. First, in order to begin to do anything we had to have some sub-

ject to work with so that what we were talking about was real and not wholly theoretical. It turns out that the subject of viral hepatitis does not meet very well one of our criteria because other than from a prophylactic point of view, there does not appear to be much in the current state of knowledge that would, if applied, influence morbidity, mortality or cost. More important, to be useful there needs to be a critical mass of data, and it is unlikely that infectious hepatitis itself constitutes a critical mass. It is even unlikely that hepatitis in general would constitute a critical mass. Perhaps liver disease would, or liver and gall bladder disease — surely, diseases of the GI system would. But now the dimensions are expanding beyond our available resources. We have to make some decision as to how to create, within our resources, a model that can be manipulated enough to be tested, and that has enough critical mass to attract interest. These are the issues which are now being considered.

As you have no doubt suspected, by this time many hours had gone by and not a few “toddlies.” I struggled to my feet having a wife and children to get home to. As I approached the door I said: “Irving, you have enough material here for three talks.”

“I think you are right — I have enough certainly to work on” — he said. “From our discussion, I think I can find something that might be of interest to the people in Oklahoma.”

As I was about to leave, I turned to him and said, “But what are you going to say about Stewart Wolf?” His face became ruddy, his blue eyes twinkled, and he said, “You know, if I search my memory bank over the past 30 years, I am almost sure to be able to find something nice to say about Stewart Wolf.”

I hope that, had he been here, he might have said some of these things — and at least not disagreed with too many of them. □

Acknowledgement

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Discussion by Dr Stewart Wolf

From Dr Schoolman's presentation you can appreciate why Dr Bird enjoyed so much his work at the National Library of Medicine. With Bob Bird, Hack Schoolman has created an atmosphere of intellectual inquiry and tough thinking, a kind of crackling atmosphere that you get when you visit the Library. They made a great pair. Among the points that you raised, Hack, that struck me particularly is the redundancy of effort with respect to the process of synthesis, the transportation of the fruits of research from bench to bedside required by the process of synthesis and translation that you were talking about. You told us that many people are involved in such an effort and with very elaborate resources at their disposal—the drug companies with their throw-away literature, for example—and yet it does not quite do it for the practicing physician. I think you said why it does not do it, but it is a frustrating

thought. They are all working on it, but with different objectives. The objective of the drug companies is to sell drugs; the objective of Dr "X" the great hepatologist is advocacy of his position, his theories, ideas, his findings. As a result the process of synthesis is confounded by advocacy. You stated very clearly to us how the approach has got to be entirely different. It must be the approach of the inquirer with an attitude of critique rather than of advocacy. Most of us who have grown old in medicine can remember many vigorous controversies. Usually it turned out that everybody was right. Once you can see the whole picture it all falls together. And yet our efforts at synthesis still fail to seek reconciliation of disparate findings and views.

Your emphasis also on the significant gaps in our knowledge is another greatly neglected aspect. The final unique feature of what you and Bob Bird have been working at is that you have devised a way to ask a question and get an answer, a way that does the job better than a textbook. I would like to leave it there so that we can all ask questions of Dr Schoolman. With respect to Dr Bird I think that Dr Hammarsten* has said it. I don't think it is possible to say it better.

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Oklahoma Medical Summit Presents

"UPDATE '78"

May 3rd-6th, 1978

Skirvin Plaza Hotel and Sheraton Century Center
Oklahoma City, Oklahoma

A combined meeting of the Oklahoma State Medical Association,
the Oklahoma City Clinical Society and the Oklahoma Academy of Family Physicians.

Oklahoma Is Ninth in Nation In Excess Birth Rate Among Teenagers

Only eight states and the District of Columbia are worse than Oklahoma when ranked by the "excess birth rate"¹ in the age group 15-19 according to the preliminary report on teenage pregnancy prepared by the Family Planning Evaluation Division of the Center for Disease Control and released in August, 1976.² These eight states are: Mississippi (ranked 51), District of Columbia (50), Arkansas (49), Alabama (48), South Carolina (47), Louisiana (46), Tennessee (45), Georgia and North Carolina (44 and 43, with identical rates). Oklahoma ranks number 42 or the ninth worst state in the United States.

The "excess birth rate" is an estimate of unintended or unplanned births per thousand women ages 15-19. This estimate, as well as an estimate of the absolute number of unintended births to mothers in this age group, has been made for each state, based on findings from national surveys made in 1971 and 1972 relating to planning status of births.

In Oklahoma, the excess rate is 35.9, or 4,545 more births than intended, for all races



News From The Oklahoma State Department of Health

in the age group 15-19. The excess birth rate for the white population age 15-19 is 25.8 or 2,813 more than intended. For the black population, the excess rate in this age group is 93.5 or 1,012 actual more number of births than intended.

One Oklahoma girl in ten becomes a mother before her twentieth birthday. In 1975, one out of every 16.7 teenage girls became a mother in that year alone. In the same year there were 10,061 live births to teenage women, which represented 23 percent of all live births in Oklahoma.

1. Excess Birth Rate: The rate in excess of intended is obtained by subtracting the 1974 calculated birth rate from the estimated intended fertility rate for 1974. The method of calculation is explained in the document referred to in footnote 2.

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COMMUNICABLE DISEASES IN OKLAHOMA FOR JULY, 1977

DISEASE	July 1977	July 1976	June 1977	Total To Date 1977	Total To Date 1976
Amebiasis	5	3	—	14	8
Brucellosis	1	4	—	2	7
Chickenpox	10	42	58	912	1556
Encephalitis, Infectious	2	2	2	10	12
Gonorrhea (Use Form ODH-228)	1074	1297	1093	7293	7496
Hepatitis, A, B, Unspecified	47	90	64	448	905
Leptospirosis	—	1	—	—	1
Malaria	—	1	—	—	1
Meningococcal Infections	—	—	4	—	18
Meningitis, Aseptic	5	2	6	22	11
Mumps	13	21	34	459	648
Rabies in Animals	20	7	13	177	90
Rheumatic Fever	—	2	1	2	10
Rocky Mountain Spotted Fever	8	30	22	55	65
Rubella	2	6	1	29	54
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	2	5	2	54	286
Salmonellosis	29	42	40	127	136
Shigellosis	7	9	—	24	142
Syphilis, Infectious (Use Form ODH-228)	8	12	8	50	70
Tetanus	—	—	—	—	—
Tuberculosis, New Active	20	32	43	191	207
Tularemia	3	1	3	7	7
Typhoid Fever	—	—	1	1	—
Whooping Cough	—	5	1	3	10

CME in Oklahoma

*An Interview with Floyd F. Miller, MD,
Chairman, OSMA Council on Medical Education.*

By Richard L. Hess,
Director of Communication

Editor's Note: A required program of continuing medical education for OSMA members was approved at the 1976 meeting of the OSMA House of Delegates. At that point, the new Council on Medical Education was given responsibility for coming up with a workable CME program for Oklahoma physicians. The Council on Medical Education has spent the past year investigating various CME proposals and working with the American Medical Association and other organizations in divising the best plan possible for OSMA members.

The OSMA CME program will go into effect January 1st, 1978. The following interview with Dr Floyd F. Miller, Tulsa, Chairman of the Council on Medical Education, explains the whys and wherefores of the new CME program.

Journal: The first question that comes to mind is why did the OSMA House of Delegates approve a program requiring continuing medical education for members?

Miller: Well obviously continuing medical education of this type is done both for the benefit of the physician and the patient. The report which was submitted to the 1976 meeting of the House of Delegates by the then Council on Continuing Medical Education pointed out that public accountability is being increasingly demanded by both the government and consumer organizations. It also pointed out that ability by virtue of licensure is no longer sufficient. It was the feeling of the Council on Continuing Medical Education that it was important for physicians to continue their education throughout their professional lives. For this



Floyd F. Miller, MD

reason, the House of Delegates at that time instructed our Council to research CME and to come up with a workable program for Oklahoma physicians. The CME program was tied directly to OSMA membership and not licensure. It has remained that way, and the program we have adopted is based upon that principle.

Journal: Several different CME proposals have been discussed and investigated by the Council on Medical Education. What exactly does the adopted program call for?

Miller: Actually, two major proposals were reviewed by our Council. One called upon us to set up our own program of establishing requirements, monitoring requirements,

monitoring credits, contacting physicians and overseeing the entire process through the state medical association. Through that proposal we would have had absolute control of our CME program, but we probably would have needed to enlarge the OSMA headquarters, and hire additional staff, and the budget would have been between \$25,000 and \$30,000. The other proposal was that we require an AMA PRA Award and let the AMA do the actual certifying and record keeping. Through that proposal we would be utilizing an already-existing system, and the need for additional staff and funding would not really exist. We submitted both proposals to the Council on Planning and Development, and that Council voiced its very strong opinion that if we chose the first alternative we would be setting up another bureaucracy requiring more money and more people to do something that the AMA was already willing and able to do for us. The Council on Planning and Development recommended that we work through the AMA PRA Award, and the Council on Medical Education agreed. The entire CME proposal was taken to the 1977 Annual Meeting and was unanimously endorsed by the Reference Committee. It also received the unanimous endorsement of the 150-member OSMA House of Delegates.

Journal: Up until now, continuing medical education has been handled on a purely voluntary basis, and I am sure many OSMA members have completed hours toward an AMA PRA Award already. How exactly do you plan to handle this? Will these hours be simply lost, must all hours toward the award be granted after the January 1st, 1978, initiation date, or are there provisions to handle this?

Miller: The true requirement is that an active AMA PRA Award be granted to each OSMA member prior to January 1st, 1981. If a physician currently has 120 hours, let's say, toward an AMA PRA Award, and the award is granted to him on January 1st, 1979, he would fulfill the requirements until January 1st, 1982. At that point he will need to have completed 150 additional hours of CME credit, in which case the period will start over again and he will have fulfilled the requirements until January 1st, 1985, and so on and so on.

Along the same lines I might point out that the AMA PRA Award has indeed been voluntary, and yet approximately 100,000 awards have been granted at the present time. Of course, in reality the program is not totally

voluntary in that several other states have chosen to use the AMA PRA Award as their system of continuing medical education. I know, for example, that Kansas is using the program as is Pennsylvania. At any rate, the program has been quite successful and most physicians have not found it to be an unreasonable burden upon them. We will be working with OSMA members to make it as good a program as possible.

Journal: Some other organizations in addition to the American Medical Association have set up their own continuing medical education programs. Will any provisions be made to accept these programs?

Miller: Yes! Provisions already have been made in that the American Medical Association will accept the program of the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists and the American Society of Clinical Pathologists — College of American Pathologists. Physicians enrolled in these programs and completing their requirements will need only to contact the AMA, and an AMA PRA Award will be granted to them on the basis of fulfilling their requirements through these CME programs.

Journal: Since the OSMA is requiring CME for membership, it would seem logical that we would have a responsibility for helping members meet these requirements. What is the OSMA doing in this regard?

Miller: First of all the OSMA Committee on Survey for Accreditation is conducting on-site visits of hospitals and other institutions wanting to participate in the OSMA-AMA program. These surveys are designed to investigate the CME capabilities of the institutions, and they are ultimately designed to enable the OSMA to recommend either accreditation or non-accreditation. Actually, we send our recommendations to the Liaison Committee on Continuing Medical Education which contains members from various organizations. For example, there are people from the American Medical Association, the American Hospital Association, people from government, lay persons and others. This relatively new organization makes the final approval or disapproval.

In our surveying efforts, we have a three to five-member survey team go to the hospital or institution and survey it after extensive pre-survey preparation by the hospital. That team makes a survey, decides its recommendations

and brings the recommendations to the full Council on Medical Education. If we agree with their recommendations, that is if they recommend approval and we agree, their recommendation is simply forwarded to the LCCME. However, if they recommend disapproval and we agree, this recommendation is also forwarded, but we also must explain to the hospital why we cannot recommend approval. The hospital or institution may then appeal to our Board of Trustees.

Well obviously continuing medical education of this type is done both for the benefit of the physician and the patient.

If the hospital is fully approved, then it can conduct Category I CME courses for the entire length of approval without having these courses individually approved. If the institution is not fully approved or accredited, it may only be able to conduct Category I CME courses in pediatrics or psychiatry or some other departments. If the institution is given provisional approval, then they are able to put on CME courses but we maintain close contact with the institution and review their status periodically. If an institution is disapproved, it may undergo the survey process again at a later date. I want to stress that we will simply be surveying institutions and not courses. That is not our role at all.

Journal: How many hospitals and other institutions do you think will ultimately be surveyed by the OSMA?

Miller: When we started gearing up for the surveying process, we contacted all the hospitals in the state and asked if they would be interested in being accredited to conduct Category I CME courses. Of the some 130 memos we mailed, we received approximately 60 responses. Each of these institutions was sent an extensive pre-survey booklet and questionnaire which they were required to complete. Of those 60 institutions, to date we have received seven completed forms. Each of these seven institutions will be surveyed. At this point Hillcrest Medical Center in Tulsa and St.

Anthony Hospital in Oklahoma City have undergone the surveying process. Dr W. R. Smith of Enid is heading this part of the program, and I think he and his committee are doing an excellent job.

Journal: Obviously, fulfilling the CME requirements will be a bigger task for physicians in the rural areas than it will be for physicians in the metropolitan areas. Have you considered taking accredited CME courses out into the smaller communities?

Miller: We originally felt that it would be necessary for this Council to cooperate with the University of Oklahoma Health Sciences Center in taking meetings to smaller towns in Oklahoma. Obviously physicians practicing in the rural areas have a difficult time getting into CME courses in the cities, and we thought this would be one alternative. However, past experience with this type of meeting has not been successful, and I doubt very seriously if this will be done. Past meetings were very poorly attended and apparently were not well received by physicians. We don't know exactly why these meetings weren't successful, but we are seriously re-evaluating this proposal. Incidentally, we would appreciate hearing from any physicians who have strong feelings on this matter. Obviously it is our goal to do whatever is necessary, so we would like to hear from the physicians in the rural areas. I would like to add that we do have rural representation on the Council on Medical Education, and we have very definitely tried to keep the particular problems of the smaller communities in mind when developing this program.

. . . ability by virtue of licensure is no longer sufficient.

Journal: Could you explain a little bit more about the AMA PRA Award and the Category I credit?

Miller: The principal thing to remember about the AMA PRA Award is Category I. All 150 hours of the AMA PRA Award can be Category I credit, but at least 60 hours must be from Category I. Many of the other hours can actually be obtained from reading educational materials, from writing papers or books on

medical topics, and from other meritorious learning experiences, but Category I hours are very specific. For example, credit earned in this category must be sponsored or cosponsored by an AMA accredited organization, and it must meet other very strict criteria. That's one reason we are very careful in our surveying process to make sure that accredited hospitals are capable of meeting all the criteria. We want to conduct a quality CME program, and I think by the time it's all finished, we will be able to do this. Incidentally, in addition to the Category I credit, there are five other categories of acceptable CME credit. Unlike Category I, each of these categories has a limit upon how many hours may be earned in this particular category. Before the OSMA program is kicked off, complete information will be provided to all OSMA members. Presently this information is available from the American Medical Association.

Journal: What happens to the OSMA member who does not fulfill the CME program?

Miller: Well, unless an appeal is made to the Board of Trustees and unless the Board of Trustees upholds that appeal, the physician's membership in the OSMA would be dropped. According to our guidelines, the board can grant a deferment for a certain period of time, and assuming the PRA Award is obtained during that time, then the person could continue to be active. If, however, the PRA Award is not obtained, then he would no longer be eligible for membership in the state medical association. We're going to try to be flexible when necessary, but I think it's important to point out that this requirement is for all OSMA

The true requirement is that an active AMA PRA Award be granted to each OSMA member prior to January 1st, 1981.

members and no automatic waivers will be granted on the basis of age or any other consideration. We feel this is a good program for all members, and we want all members to take part.

Journal: How do you see the interface between CME program, Council on Medical Education, the Council on Scientific Assembly, and Oklahoma Medical Summit developing?

Miller: I think this interface is a very important phase of medical education in Oklahoma. The Council on Medical Education has certain responsibilities, the main of which is setting up this program. The Council on Scientific Assembly, which is a new Council which was suggested by the President, Dr C. S. Lewis, Jr., and its purpose is to aid not only medical groups but allied organizations in setting up education courses. Obviously Oklahoma Medical Summit has been the principal OSMA-sponsored education activity for the past few years, and it will play an important role. As a matter of fact, Summit has averaged about 20

I think every doctor needs to pursue continuing medical education . . .

hours of Category I credit each year, so if a physician attended this meeting alone, he could fulfill all of his Category I requirements. The rest of the hours could be accomplished more easily. I want to emphasize here that we'll also be working very closely with the Department of Continuing Medical Education at the University of Oklahoma.

Journal: One of the criticisms I have heard concerning continuing medical education is that the courses are not always relevant and yet credit is granted. In other words, a neurosurgeon can receive credit for attending a course in dermatology. Do you have any feelings on this?

Miller: I feel very strongly that this is perfectly acceptable. If this is an incentive for a physician to get out and broaden his medical perspective, even if he's not working directly in this field, I think it's great. I think an internist who goes to a general surgery grand rounds benefits tremendously, and I think a general surgeon who goes to internal medicine grand rounds also benefits. The fact that they would get category requirements for courses not related to their direct field of medicine should not be discouraged in any way, because I think it actually improves the physician's ability to treat the patient. It broadens their outlook on the practice of medicine, and I don't think that we should do anything to limit a doctor's knowledge of medicine. I think one of our problems in medicine is that we sometimes practice too

narrow a base of specialty, and if a neurosurgeon goes to a psychiatry session and gets Category I credit, I think that's super. I don't see anything wrong with this at all.

Journal: What about the doctor who complains that he's completed medical school and there's no need for him to continue his education in this manner?

Miller: I think every doctor needs to pursue continuing medical education whether he does it on his own or in some sort of organized program such as this. Medicine is a dynamic field, and to keep up to date doctors have to continue their education. It's just a matter of how much. I really don't think this is going to be a problem because I think nearly all the doctors realize that they have to keep reading and keep going to courses in order to practice good medicine. On the other hand, I know that some physicians object to being forced to keep more records. They say, "I attend the courses, but why should I be burdened with more paperwork." I guess this just doesn't bother me as much as it does some people. Granted, it's just one more thing you have to do, but I think ultimately the benefits will far outweigh the disadvantages of this program. Now if you ask me if I am a great supporter of the PRA program, I will tell you that I took this job strictly as a mechanic to work out the details, not as a person who is pushing the AMA PRA Award. I can't prove to you that having a PRA Award makes you a

We have to hope that the physician is conscientious and attends the meetings and gets out of it what he can.

better physician. This is up to the physician himself. We have to hope that the physician is conscientious and attends the meetings and gets out of it what he can.

Journal: How much is this program going to cost the OSMA member?

Miller: In terms of additional expense out of his pocket, absolutely nothing. The PRA Award is free for AMA members, and of course, all of our members belong to the American Medical Association. Our entire budget for this program is \$5,000 this year, and this comes from the OSMA operating budget. If you con-

sider that there's approximately 2,500 physicians in this state, I think you'll have to agree that \$2 a person isn't much to pay for a program of this magnitude. We were able to decrease the cost from an estimated \$30,000 to \$5,000 by coordinating it through the AMA.

Journal: How do you see this program developing in the future? What's going to happen to continuing medical education in your opinion?

I think the AMA PRA Award which we are using is well designed . . .

Miller: As I said earlier, there is greater and greater demand on the part of government and the public for accountability in this area, and I think we can no longer look at licensure as the only requirement in this respect. I think we'll see continuing medical education expand and become even more important to the practicing physician as the extent of medical knowledge becomes greater. Obviously with increased knowledge and increased technology, it's going to be more important for the physician to attend courses and to do study upon his own.

I think the AMA PRA Award which we are using is well-designed and well thought out. Like I said, I can't prove to you that it will make anyone a better doctor, but I believe the potential is there. I think by initiating this program on our own, we are showing the people who are, in fact, our patients, that we are intimately concerned with the quality of medical care and medical education and that we are willing to do something to insure it without this being dictated to us by the federal government. I believe this is in the best interests of both the physician and the patient, and I am happy to have been a part of it. ☐

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Typical of the dedicatory remarks were those of Dr John A. Schilling, formerly of Oklahoma City and presently professor and head of the Department of

Surgery at the University of Washington Medical Center. "It is no accident that the George H. Garrison Tower is so named. He is one of the truly distinguished men of the state of Oklahoma. He is a beloved pediatrician who has devoted his entire professional life to the medical care of children. More than that, through his gentle interpersonal relationships and his simplistic integrity as a person — the hallmark of greatness — he has provided a role of leadership and precept that is difficult to equal."

Dr Garrison's own comments, "children are the nicest people we know," speak well for the manner in which he has practiced his profession. □



l-r Lloyd E. Rader, Dr Garrison, Dr John A. Schilling, Mrs. George Garrison



Dr R. Q. Goodwin (OSMA President, 1956-1957) and Dr Garrison

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Edwards Featured at Health Forum



Congressman Mickey Edwards

Terming the Carter Administration's Hospital Cost Containment Act as an "automatic hospital bankruptcy bill," Congressman Mickey Edwards of the 5th Oklahoma District kicked off the Council on Governmental Activities' series of health forums. Edwards appeared at Presbyterian Hospital on August 31st.

Congressman Edwards was critical of both the administration plan and the Talmadge proposal for hospital cost containment, saying both were unworkable and short-sighted. He pointed out that although the various CAP plans would limit hospital income, no corresponding plans have been submitted to limit expenses.

Edwards said the CAP proposals were additional examples of a sad but true commentary on Congress.

"The further the bill is from reality, the better chance it has of passing."

The doctors and guests at Presbyterian seemed to enjoy the opportunity to speak one on one with their congressman and took advantage of a lengthy and informative question and answer period. A date has not yet been selected for the next health forum, but eventually all congressmen and senators plan to take part. Look for details in future issues of *The Journal* and the *OSMA Newsletter*.

The Council on Governmental Activities has also been active setting up a system for reviewing state and federal legislation. This group was given full council status during the reorganization of OSMA councils and committees last year and has overhauled its operation. Of primary concern to the Council has been the laborious task of reviewing the many, many health bills which are introduced before the Oklahoma Legislature and Congress. A system for this has now been worked out and the OSMA will be able to provide testimony on pertinent legislation.

In line with its lobbying efforts, the council has also set up its key man lobbying system and has hired a representative in the nation's capitol. A few weeks ago surveys were sent to all OSMA members asking for contacts they may have in either the Oklahoma Legislature or in Congress. Of the 3,000 surveys mailed, 328 responses were received, and 167 physicians listed legislative acquaintances. These physicians will be used in contacting state and national representatives on health legislation. Supplementing these efforts will be the activities of John Montgomery, the new OSMA "Man in Washington." Montgomery was hired on a one-year trial basis to represent Oklahoma physicians and Oklahoma citizens on health issues. Montgomery is a graduate of the Georgetown University Law School and also represents the City of Oklahoma City. □

OSMA Receives AMPAC Award



Dr C. S. Lewis, Jr., OSMA president, is shown here receiving a special award from the American Medical Political Action Committee. The award was presented at the AMA's annual meeting in San Francisco and was given to states whose leadership delegation had become sustaining members of AMPAC. This delegation includes all AMA delegates and alternate delegates, the president and president-elect of the state medical association and the chairman of the state PAC organization. Oklahoma was one of several states to achieve this goal. Presenting the award to Dr Lewis is Dr Michael Levis of Pittsburg, Pennsylvania, the secretary of the AMPAC Board of Directors. □

AHA Announces Research Grants

Application for Research Grants-in-aid and Postdoctoral Research Fellowships, for the year beginning July 1st, 1978, are now being accepted by the American Heart Association, Oklahoma Affiliate, for review by the research policy committee.

Forms for making such application may be obtained from the association office and must be received in that office, or postmarked, no later than November 1st, 1977. Send correspondence to the American Heart Association, Oklahoma Affiliate, Inc., 800 N.E. 15th Street, Oklahoma City, Oklahoma 73111. □

Laetrile Test Urged

The National Council on Drugs has advocated a scientific test of laetrile on cancer patients.

"The time is ripe, in 1977, for a controlled clinical trial of laetrile. This should be done under rigorous scientific conditions, in a variety of selected cancer treatment centers, under the auspices of the National Cancer Institute in cooperation with the Food and Drug Administration," the Council declared.

The statement was prepared by John A. Owen, Jr., MD, chairman of the Task Force on Laetrile of the Council. Dr Owen is an internist and pharmacologist at the University of Virginia School of Medicine, Charlottesville, Virginia.

The National Council on Drugs is a relatively new organization made up of representatives of the professional organizations most concerned with drugs and drug therapy.

The council earlier this year supported attempts of the Food and Drug Administration to consider laetrile a drug and to require proof of both efficacy and safety prior to release.

"No such proof has appeared. We still insist these conditions be fulfilled," Dr Owen said. "To disregard them is to disregard all that the FDA stands for and to return to the pre-1906 era, when any quack could produce any nostrum he wished and foist it off on the public."

The council's Laetrile Task Force agreed on three objectives:

- The FDA should earn recognition as an agency whose decisions are based on a scientific methodology and the accumulation of valid and convincing evidence.

- The medical profession as a whole should demonstrate that delicate balance of scientific knowledge and humane concern that characterizes not only a wise doctor but a good doctor.

- We should try to defuse emotional confrontations which accomplish nothing and are detrimental to any sincere effort to obtain the truth. The very appreciable advances that have occurred in conventional cancer therapy have been deliberately downgraded and denied. A comprehensive, factual and ongoing public education program on cancer is desperately needed.

The Oklahoma Legislature approved the prescription and administration of laetrile during its last session despite OSMA opposition. □

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Workers' Comp Overhauled

EDITOR'S NOTE

For the last ten years or so the Oklahoma State Medical Association, along with other organizations, has sought to overhaul the Workmen's Compensation Act in Oklahoma. Most persons involved in workmen's compensation agreed that the law was filled with inequities for all concerned. The question, however, was how to change the law.

The new Workers' Compensation Act of 1977 provides a completely new look for workers' compensation in this state. The following paper was written by John Wiggins, an attorney with the Short, Barnes, Wiggins & Margo law firm in Oklahoma City. It provides a review of many of the pertinent provisions of the new workers' compensation act which should be of interest to all physicians, especially those who see workers' compensation cases.

The new Worker's Compensation Act will not

actually go into effect until October, 1978, and The Journal will carry additional papers on this subject prior to that date.

The Oklahoma Legislature has recently revamped the concept of compensation to injured workers. The revamping begins with a change in the name of the act, found in Title 85 of the Oklahoma Statutes, from the "Workman's Compensation Law" to the "Workers' Compensation Act." Some changes have been made in the new act which affect the role of the physician in industrial accident cases.

As before the change, workers are entitled to benefits for disability due to contracting an "occupational disease" on the job in addition to disability as a result of physical trauma. The definition of "occupational disease," however, has been statutorily broadened. The old statute was specific in listing 28 types of poisons that were deemed to be occupational diseases if taken by a worker and 14 other specific diseases ranging from compressed air illness to glanders. The new statute greatly simplifies

the definition of "occupational disease" and said term is defined to mean:

. . . only that disease or illness which is due to causes and conditions characteristic of or peculiar to the trade, occupation, process or employment in which the employee is exposed to such disease.

From the standpoint of the physician, the salient terminology in the above definition is that the disease or illness must be due "to causes and conditions characteristic of or peculiar to the particular . . . employment." By broadening the definition of occupational disease the physician's role is broadened in that he will be called upon to give an opinion on the cause of the particular ailment and further relate it to a condition characteristic of the worker's job.

The new Act also contains a statutory definition of "permanent impairment" which heretofore had not existed. This term is defined to mean:

. . . any anatomical or functional abnormality or loss after reasonable medical treatment has been achieved, which abnormality or loss the physician considers to be capable of being evaluated at the time the rating is made.

It is noteworthy that the physician is not to render an opinion on impairment until *after* "reasonable" medical treatment has already been achieved. The Act further provides that in determining permanent impairment:

Any examining physician shall evaluate impairment in substantial accordance with such guides to the evaluation of permanent impairment as have been officially approved by a majority of the Workers' Compensation Court. These guides may include, but shall not be limited to, the 'Guides to the Evaluation of Permanent Impairment' published in 1971 by the American Medical Association. The Court shall be empowered to add, delete or revise its Guides as its majority sees fit . . . These officially adopted Guides shall be the basis for testimony and conclusions with regard to permanent impairment with the exception of Paragraph 3 of Section 22 of this title, relating to scheduled member loss.

In any case where the examining physician deviates from said Guides the basis for said deviation shall be stated.

The purpose of this addition in the Act is obviously designed to bring the evaluations of

the employer and employee's doctors more in line with each other and avoid the criticism that has been leveled in the past, justifiably or unjustifiably, that "plaintiff's doctors" give the opinion that the injured worker is substantially disabled and the "insurance doctors" give the opinion that this same worker is only minimally injured, if at all. This change does not give the physician as much leeway as he had in the past in evaluating the degree of permanent impairment a worker sustained. As the Act states, in the event the physician deviates from the Court adopted guides in giving his evaluation of impairment he must further support his opinion by giving the reasons for his deviation. The Act then states that "permanent impairment" falls into two categories, "permanent total disability" and "permanent partial disability." The former means:

Incapacity because of accidental injury or occupational disease to earn any wages in any employment for which the employee is or becomes physically suited and reasonably fitted by education, training or experience; loss of both hands, or both feet, or both legs, or both eyes, or any two (2) thereof, shall constitute permanent total disability.

The latter term is defined to mean:

. . . permanent disability which is less than total and shall be equal to or the same as permanent impairment.

It should be noted that the giving of an opinion by a physician that a worker is "permanently totally disabled" requires a conclusion by the physician that the worker is and will be unable to earn *any* wages in *any* employment for which the employee is or *may become* suited for. This is noteworthy because the Act provides in later sections for the rehabilitation of the injured worker with an eye toward putting him or her back into the work force in some capacity, which if successful would not render said worker "permanently totally disabled." This would seem to indicate that the examining physician should reserve an opinion on permanent total disability until after medical and rehabilitative efforts have been accomplished.

Under the Act, the employer has the duty of providing the employee with immediate medical attention. The doctor giving said attention has the statutory duty to provide both the employee and the employer a report of the injuries sustained and the proposed treatment, said report being required within seven (7) days of the

date of the examination. The doctor also has the duty to give the employer a report of his treatment of the employee at the conclusion of the treatment.

If the employer fails to provide medical treatment the employee can secure it at the employer's expense. In the event the employee goes to a physician other than one of the employer's choosing, the employer has the right to select a doctor who has the right to examine the employee. In this event the examining physician has the duty of providing the employee with report within seven (7) days of his examination.

In the event the employee does not wish to be treated by a doctor of the employer's choosing, he has the right to select his own physician at the employer's expense. The doctor the employee selects must notify the employer and/or the employer's insurance carrier of the employee's selection within "a reasonable time" after the initial examination or treatment. Under the old Act it was provided that this notification must be given within seven (7)

days. This term has been dropped and replaced with a "reasonable" time limit.

Unless there is a written contract between the employer or the insurance carrier and the person or entity rendering medical care, whoever renders medical services must submit the reasonableness of the charges to the Court for its approval as to reasonableness.

The new Act provides that the Court has the authority to order a change of physicians at the expense of the employer when, in its judgment, such change is desirable or necessary and application has been made by either the employee or the employer or its insurance carrier for a change of physicians.

Naturally, the Act provides that the employer shall not be liable to make any of the payments for medical treatment in the event the employer successfully contests liability for the injury.

As earlier mentioned, the Act provides for rehabilitative services in an effort to place the employee back into the work force. The new Act provides:

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An employee who has suffered an accidental injury or occupational disease covered by the Workers' Compensation Act shall be entitled to prompt and reasonable physical and vocational rehabilitation and job placement so as to restore him to gainful employment. If rehabilitation services are not voluntarily offered by the employer and accepted by the employee, the judge of the Court may on his own motion, or if requested by a party shall, after affording all parties an opportunity to be heard, refer the employee to a qualified physician or facility for evaluation of the practicality of, need for and kind of rehabilitation services or training necessary and appropriate in order to restore the employee to gainful employment. Upon receipt of such report, and after affording all parties an opportunity to be heard, the Court shall order that any rehabilitation services or training, recommended in the report, or such other rehabilitation services or training he may deem necessary, provided the employee elects to receive such services, shall be provided at the expense of the employer. Refusal to accept rehabilitation services by the employee shall in no way diminish any benefits allowable to an employee.

It is apparent from the above that the role of the physician is broadened to rehabilitation for re-entry into the work force if, in the opinion of the physician, rehabilitation services or training would be beneficial in order to restore him to gainful employment. The Act provides that rehabilitative services are not to exceed one (1) year; however, it additionally provides that this period may be extended for an additional year or any portion thereof by order of the Court. It should be noted that a request for vocational rehabilitation services or training must be filed with the Administrator of the Court anytime after the date of the injury but not later than sixty (60) days from the date of the final determination that permanent disability benefits are payable to the employee. Additionally, if rehabilitative services are ordered and it becomes necessary for the employee to be away from home to undergo rehabilitation the reasonable cost of his board, lodging, travel, tuition, books and necessary equipment in training shall be paid for by the insurer in addition to the weekly compensation benefits to which the employee is otherwise entitled.

The final determination of the amount of disability existing is the responsibility of the Court, which is aided by the opinions of the physician. The Act provides:

. . . any claim submitted by an employee for compensation for *permanent* disability must be supported by competent medical testimony which shall include an evaluation by a physician stating his opinion of the employee's percentage of permanent impairment and whether or not the impairment is job-related and caused by the accidental injury or occupational disease. . . . the written medical testimony of any physician shall be on a form provided by the Administrator.

The importance of the physician's role in cases of permanent disability is seen in that the physician must give an opinion (1) on the percentage of permanent impairment, (2) whether it is job-related and (3) whether it is caused by an accidental injury or occupational disease. Further, this testimony must be on a form that the physician can secure from the Administrator of the Court.

In a further effort to get away from the criticism leveled at the sometimes vastly different opinions by physicians on the percentage of disability, the new Act provides:

When the medical testimony to be introduced on behalf of the employee and employer is divergent by more than thirty percent (30%) as to the extent of permanent impairment of the employee or when there is any disagreement in the evidence as to the medical cause of the medical permanent impairment, any party may challenge such testimony by giving written notice to all other parties and to the Administrator. Upon receipt of such notice, the challenging party and the party challenged shall select a third physician who shall be afforded a reasonable opportunity to examine the employee together with all medical records involved and any other medical data or evidence that he may consider to be relevant. The third physician shall issue a verified written report on a form provided by the Administrator to the Court stating his finding of the percentage of permanent impairment of the employee and whether or not the impairment is job-related and caused by the accidental injury or occupational disease.

The physician's role is thus expanded to that of a mediator in the event physicians are divergent by more than thirty percent (30%) on the extent of permanent impairment or disagree as to the cause of the impairment. As stated, however, the final determination of the amount of permanent impairment is for the Court.

In the event the challenging party and the challenged party are unable or unwilling to agree upon the appointment of a third physician within ten (10) days, the Act provides that

the Court shall appoint one and that this Court-appointed physician shall have had at least five (5) years' practice in the area of medicine dealing with the particular injury or disease involved. If the Court-appointed physician is utilized as opposed to a physician that the parties agree upon, either party has the right to object to the introduction of his written report into evidence. This objection must be made by written notification to all parties and the Court within five (5) days after the receipt of the report. If this is done, the Court-appointed physician must then testify in person or by deposition.

Any physician who is appointed and who gives evidence shall be reimbursed for the medical examination, reports and witness fees in a reasonable amount set by the Court which shall be borne by the employer as costs.

While not directly affecting the role of the physician in compensation cases, the new Act has made some changes concerning the amount of disability available to an injured employee. In the event permanent total disability is adjudged the employee is entitled to two-thirds (2/3) of his average weekly wages during the continuance of the total disability without any time limit. Under the old Act the employee was only entitled to said benefits for a maximum of five hundred (500) weeks. The new Act reads as though the employee is entitled to said benefits for his lifetime.

In conclusion, the new Act enlarges the role of the physician in compensation cases while it also attempts to bring physicians closer together in their evaluations of injury by requiring them to comply with Court-approved guides in rating disabilities or, if they choose not to follow said guides, to require the physicians to support the reasons for their divergence. □

Endowment Program Supported

The OSMA Council on Medical Education has given its formal support to the concept of a Professorial Chair or Professorship in continuing medical education at the University of Oklahoma College of Medicine. The council has been studying a proposal which calls upon the OSMA to endow such a chair for over a year as part of its support for medical education. The cost of endowing such a chair would be \$750,000 and would be raised over a period

of years. The council action does not officially mean that the OSMA will endow such a chair, but does at least support the program in concept.

Additional study will be made before a final decision is reached.

In other activity, the Council on Medical Education has also been busy preparing the OSMA program of continuing medical education which will go into effect January 1st, 1978. This program is patterned after the AMA PRA Award, which requires 150 hours of continuing medical education each three years. Beginning January 1st of next year, all OSMA members must have an active AMA PRA Award prior to January 1st, 1981 to remain OSMA members. (For additional information, see the interview in this *Journal*.)

As part of the program for readying the OSMA CME plan, the Council on Medical Education has sponsored two surveys of institutions for accreditation. Hillcrest Medical Center in Tulsa was surveyed on July 27th, and St. Anthony Hospital in Oklahoma City was surveyed on September 7th. These hospitals and other institutions are being surveyed for accreditation to conduct Category I CME programs. Five other hospitals are now scheduled for surveying. □

HEW Regions To Hold NHI Meetings

It was learned at the recent meeting of HEW's Advisory Committee on National Health Insurance in Madison, Wisconsin, that each of the Regional Offices of HEW have been instructed to submit plans for holding a series of public hearings on NHI.

The original plan was to hold ten meetings in each of the ten HEW regions but has since been modified to require that at least one meeting be held in each state. The target date for holding these meetings is between mid-September and the end of October.

So far the only instructions which have apparently been given to the Regional Offices is to make the public hearings as broad in size and in public participation as possible. It was not announced as to what use the proceedings of these hearings will be put although it may be assumed that they will be taken into consideration by HEW as it is formulating the Administration's NHI bill. □

Medical Students Receive Scholarships

The Physician Manpower Training Commission has awarded seven medical students with rural medical education scholarships. The selection of the scholarship recipients was announced prior to the beginning of the 1977-78 school term.

Terry Boucher, PMTC Executive Director, explained that the financial aid is made available by an act passed by the Oklahoma legislature in 1975. This act set up the PMTC and established the scholarship program. The rural medical education program provides scholarships for medical students planning to practice medicine in non-metropolitan areas of Oklahoma. In return for the state aid, scholarship recipients agreed to practice a minimum of two years in an Oklahoma community with a population of less than 7,500 persons.

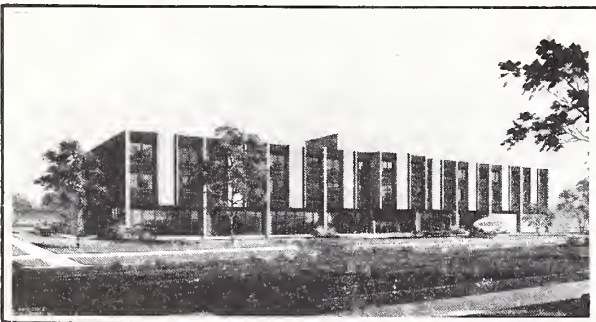
Those named as scholarship recipients at the University of Oklahoma College of Medicine are David Duffner, Edmond, Nathan Graves, Sulphur, John Hubanks, Hollis, Jerry Keaton,

Nowata, Phil Lindsey, Lawton, Steven Swank, Edmond, and Mike Westmoreland, Marietta.

Currently 29 medical students are receiving scholarship aid through the program.

The commission also approved funds totaling \$678,000 in support for the state's intern-residency cost-sharing program. The funds will provide for development of 40 new residency positions for physician training in Oklahoma health care institutions. Receiving state appropriations for the next fiscal year are the University of Oklahoma College of Medicine (Oklahoma City), \$258,000; the University of Tulsa Medical College, \$252,000; the Oklahoma College of Osteopathic Medicine and Surgery (Tulsa), \$138,000; and the University of Oklahoma Enid Family Practice Program, \$30,000.

The commission also voted to support a physician manpower and distribution study to be headed by OSMA President, Dr C. S. Lewis, Jr. Dr Lewis, who is a member of the commission, said the survey will be conducted in cooperation with other health related organizations to provide an estimate of Oklahoma's future physician supply and distribution. □



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DEATHS

JAMES N. OWENS, JR., MD
1916-1977

A well-known, Oklahoma City physician since 1949, James N. Owens, Jr., MD, died August 16th, 1977. He was born in Mulberry, Tennessee, and moved to Oklahoma in 1919. A graduate of Vanderbilt University School of Medicine, Doctor Owens practiced in Shawnee, Oklahoma, before moving to Oklahoma City. He was an Associate Professor at both Vanderbilt and the University of Oklahoma Health Sciences Center.

Doctor Owens was a Fellow of the American College of Pathology, and a member of the American College of Physicians, the American Society of Clinical Pathologists, the Southern Medical Association, the American Association of Blood Banks and the American College of Nuclear Medicine.

ROBERT J. CASSIDY, MD
1930-1977

Robert J. Cassidy, MD, an Oklahoma City orthopedic surgeon, died August 20th, 1977. A native of Minneapolis, Minnesota, Dr Cassidy lived most of his life in Oklahoma City. He was graduated from the University of Oklahoma Health Sciences Center in

1955. He had practiced in Oklahoma City except for one year while he was in Wichita, Kansas.

WALLACE L. DIXON, MD
1888-1977

A Cement, Oklahoma, general practitioner, Wallace L. Dixon, MD, died in Oklahoma City on August 6th, 1977. Born in Baton Rouge, Louisiana, Dr Dixon, 88, was graduated from Memphis Medical College in 1913. Following service during World War I, he established his practice in Cement, retiring in 1976. In 1972, the OSMA honored Dr Dixon with a Life Membership in recognition of his years of service to humanity and the medical profession.

SAMUEL E. FRANKLIN, MD
1908-1977

Samuel E. Franklin, MD, 68, general surgeon in Broken Arrow, Oklahoma, died August 16th, 1977. Following his graduation from Northwestern University Medical School, Dr Franklin joined his father in practice in Broken Arrow. He was a member of the American College of Surgeons. In 1959, Dr Franklin was honored when the Auxiliary to the Tulsa County Medical Society named him "Doctor of the Year." □

Annual Arkansas-Oklahoma Cancer Forum To Convene

The Annual Arkansas-Oklahoma Cancer Forum will be held at the Sheraton Inn, Fort Smith, Arkansas, on November 17th-18th, 1977. Many renowned speakers who have contributed to clinical successes resulting from research in cancer will participate in the program. They are:

Dr Frank Rauscher, former director of the National Cancer Institute and now with the American Cancer Society; Dr I. Bernard Weinstein, Columbia University; Dr Alfred Ketchum, former Chief of Surgery, National Cancer Institute and now with the University of Miami; Dr Charles Coltman, Southwest Oncology Group, Lackland Air Force Base, San

Antonio, Texas; Dr Theodore J. Brickner, Natalie Warren Cancer Center, Tulsa; Dr Edward M. Copeland, University of Texas; Daisy Lee Berry, Children's Hospital, Little Rock, Arkansas, and Dr William Trantum, University of Arkansas.

Also speaking will be Dr William Thurman, Provost, Dr G. B. Humphrey, Dr Jay Paul Cannon, and Dr Charles D. Sexauer, all of the University of Oklahoma Health Sciences Center. From the Oklahoma Medical Research Foundation and OUHSC will be Dr Richard Bottomley and Dr Petre Grozea.

Discussions during the two-day meeting will point out the areas in which immunology and cancer chemotherapy have been important adjuvants to radiation therapy and surgical approaches in the care of cancer patients. □

Rodgers Honored by OHA

More than 200 persons turned out in August to honor the executive director of the Oklahoma Hospital Association, Cleveland Rodgers. Rodgers was being honored for completing his 30th year as executive director of the hospital association. In addition to the honor which was bestowed upon him at the Sheraton Century Center Hotel in Oklahoma City, Governor David L. Boren proclaimed him "Outstanding Oklahoman" for his years of service in the field of health care. □



Government Figures Costly

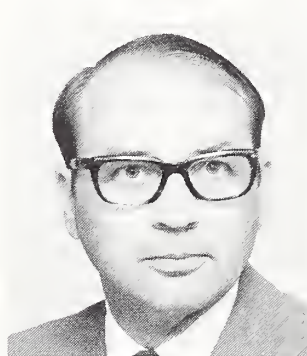
One senator must have been surprised when, a few days after receiving a batch of statistics on physicians' income from the AMA, he saw an HEW news release containing very similar information. Sen. Herman Talmadge (D-Ga.) asked the AMA for the material and got statistics for five years (1970-74) at no charge. The HEW figures were one year newer, but they were for one year only, and they cost the government thousands of dollars. They were produced by a survey firm as part of a \$400,000 study for HEW. The AMA figures are available for \$4.50, along with much other data, in the book *Profile of Medical Practice*, published by the AMA's Center for Health Services Research and Development.

The statistics sent to Sen. Talmadge by the AMA show that physician average net income in 1974 was \$51,997, before taxes. The HEW figure for physician average net income in 1975 is \$53,600, before taxes. That may be surprising too — an increase of 3.8% from 1974 to 1975, when the Cost of Living Index rose 9.1% and the personal income figure for all workers went up about 8%.

The HEW Survey also shows that the "typical" physician worked 58 hours a week in 1975. According to the *Statistical Abstract of the US*, published by the Commerce Dept., the average work week in this country is 36.1 hours. The

physician's average net income of \$53,600 would be equivalent to \$33,400 if he had worked a 36.1-hour week, or \$36,900 if he had worked a more conventional 40-hour week. From his net income the physician usually must account for the "fringe" benefits that most working people receive, at least in part, from their employers. □

Jerry R. Nida, MD, Appointed To New Post



Jerry R. Nida, MD

State Health Commissioner Dr Joan K. Leavitt announced in August the appointment of Dr Jerry R. Nida to the position of deputy commissioner for personal health services, state health department. □

Dr. Nida had served as chief of maternal and child health service at the state health department since September, 1976. He served as director of the pediatrics division from 1974 to 1976.

Dr Nida practiced pediatrics at the Oklahoma City Clinic from 1969 to 1974 when he first joined the state health department. The 43-year-old physician is a native of Perry, Oklahoma. He received his Doctor of Medicine degree in 1960 from the University of Oklahoma. He received his Master of Public Health degree in Health Administration from the University of Oklahoma College of Health in 1976.

Dr Nida in his new position will supervise the activities of the maternal and child health service, dental service, laboratory service, nursing service and preventive medical service of the state health department. □

DATES TO REMEMBER

Board of TrusteesNovember 19th, 1977
(OSMA Headquarters) February 18th, 1978

Council on Planning and
DevelopmentMarch 3rd-5th, 1978
(Oklahoma City)

Oklahoma Medical Summit ..May 3rd-6th, 1978
(Oklahoma City)

BOOK REVIEWS

INFECTIOUS DISEASE REVIEWS. Edited by William J. Holloway, Mount Kisco New York, Futura Publishing Company, Inc., 1976, 322 pages, \$29.50.

This volume, the fourth in the series, contains papers presented at the Annual Infectious Disease Symposium held at the Delaware Academy of Medicine in Wilmington, Delaware. Volume 4 consists of papers given at the 11th and 12th Symposia held in 1974 and 1975 respectively.

This volume is somewhat expanded over previous issues in this series and presents 21 different topics on infectious diseases. A wide range of subjects is discussed including pleuropulmonary disease due to anaerobic bacteria, mycoplasma infections, clinically significant mycobacteria, staphylococcal infections, bacterial endocarditis and others. The two articles by Andriole dealing with the diagnosis and treatment of gram-negative sepsis and the diagnosis and treatment of urinary tract infection are excellent summaries of the problem. There are two very good chapters dealing with the developments and rapid method for detection and identification of micro-organisms and one on current trends in diagnostic microbiology and automation in microbiology laboratory. Dr George Savage of the Upjohn Company provides an interesting essay entitled "The Human Side of Drug Research." The final two chapters deal with the cephalosporins. Griffith and Black provide a concise, excellent review entitled "Ten Years of Cephalosporins" and Holloway, "A Critical Evaluation of the Cephalosporin Antibiotics."

Each of the sections contains a concise but up-to-date bibliography.

Most workers in infectious disease will find items of interest to them in this volume. It is a reference rather than a book to be used widely by students or trainees. *Harris D. Riley, Jr., MD*

CLINICAL TOXICOLOGY OF COMMERCIAL PRODUCTS. Fourth Edition, R. E. Gosselin, H. C. Hodge, R. P. Smith and M. N. Gleason. 1782 pages, Williams and Wilkins Company, Baltimore 1976, \$54.00.

The stated purpose of this book is to assist the physician in dealing quickly and effectively

with acute chemical poisonings arising through misuse of commercial products. This book is unique in that it is the only one of its kind which provides a large compilation of information on toxic ingredients in industrial, household and drug products. It is an indispensable resource to those concerned with the emergency treatment of various types of poisonings.

The format is the same as in previous editions with divisions into general emergency treatment, toxic ingredients, index, therapeutic measures for common poisons, supportive treatment, trade-name index and a list of manufacturers. This edition features a change in format to facilitate rapid retrieval of information and an increase in the number of products covered.

This book should be available for reference purposes in every emergency room and major hospital. *Harris D. Riley, Jr., MD*

OCULAR SYNDROMES. Third Edition by Walter J. Geeraets. 655 pages, Lea and Febiger, Philadelphia 1976, \$45.00

Ocular Syndromes was first published in 1965 as a pocket-sized book for "quick reference" to the ocular manifestations of some 167 syndromes. Now in its third edition, it has grown to full size and includes some 436 entries. It also contains an improved system of cross-reference to the syndromes. It is divided into sections on the ocular manifestations, etiologic factors, systemic manifestations, age, sex, heredity and others. Despite its increase in size, there are many areas in which information has not been updated.

In spite of this criticism, the reader will find a large amount of useful information in this book if he can chin the high price. *Harris D. Riley, Jr., MD*

Current Therapy 1976, edited by Howard F. Conn, 916 pages, Philadelphia, W. B. Saunders Company, 1976, price \$23.00.

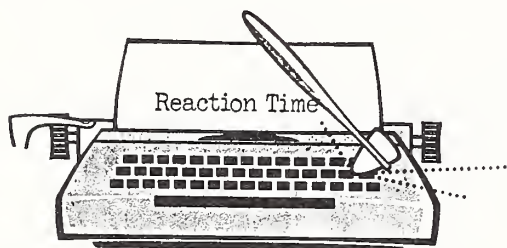
Since 1948 this publication has appeared annually with the purpose of providing information needed for treatment in the disorders seen in medical practice. Following established policy, this edition is not simply a revision of

previous editions. Of the 289 articles, 267 are by new authors and most of the remainder has been completely revised.

The book consists of 16 sections. Each section deals with a body system or with a major clinical area such as metabolic disorders, physical and chemical injuries, infectious diseases and others. It also contains useful appendices and an index. For physicians trained in other countries the drug glossary includes international synonyms.

This edition continues as a useful reference for all physicians. *Harris D. Riley, Jr., MD* ☐

REACTION TIME



I am convinced that lives now needlessly lost to severe systemic reactions to insect sting could be saved by a greater awareness of both the possibilities of such fatal responses and of the existence of insect sting kits to be employed as emergency, first aid measures to stave off anaphylaxis. Because of this conviction, I am in the process of collecting and collating data on the incidence of such fatalities. I am especially interested in the time lapse between sting and death, although other information would also be greatly appreciated such as the following: time sequence of symptoms, previous reactions victim may have had to insect stings, whether and what medication the victim may have had on hand at the time of the incident, the type of insect if known, how many stings the victim may have suffered, and an estimation of whether or not a physician or hospital emergency room could have been reached in time to avoid a fatal outcome.

Thank you.

Claude A. Frazier, MD
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Miscellaneous Advertisements

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OB-GYN, board certified/eligible to join established solo OB/GYN in Oklahoma, 30 miles from Oklahoma City. Salary then partnership. Terms flexible. Send curriculum vitae. Write to Key N, *The Journal of the Oklahoma State Medical Association*, 601 N.W. Expressway, Oklahoma City, Oklahoma 73118.

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Non Compos Mentis Federalis

Some months ago it was stated on this page that the federal bureaucracy was manifesting symptoms of schizophrenia. Since then, things have deteriorated and now, total dementia prevails. Unmitigated insanity is, beyond any reasonable doubt, the only possible diagnosis. Caesar Nero and Grigori Rasputin could feel quite at home today in our governmental chambers, although their relatively conservative behavior and rational utterances might cause them to be conspicuous in Babel-on-the-Potomac.

If such a proposition strikes you as outrageous or, at least exaggerated, let's review some of the evidence which supports the verity of the diagnosis. Elected or appointed politicians and the ever-anonymous spokesmen for the agencies, bureaus, cabinets and boards created by the politicians, located or residing — transiently — in that mecca-of-madness, Washington, DC, have recently said or brought about or created laws, rules, regulations and policies which in turn say or propose or require the following:

The health care business in this country is a cottage industry. It is big business, obese and fat.

Doctors and the AMA continue to perpetuate a conspiracy which is responsible for the shortage of physicians in this country. There are too many doctors, already. Each new doctor who goes into practice generates \$250 thousand of additional health care costs annually.

American physicians are profligate says a cabinet secretary — who recommends that 92 of his department's 353 committees be eliminated or merged — and who authorized the expenditure of \$250 million this year for a fractional quality control program — and who vigorously supports a federally sponsored health care program which will cost \$160 billion a year — and who has ordered his department to spend \$300 thousand a year publishing lists (to date, erroneous) of physicians receiving Medicare payments (all of which are delayed and most of which are dearly earned) — and who flies around the country at the taxpayers' expense making political speeches and calling doctors profligate.

Sponsored a nation-wide immunization pro-

gram which was "free" and which has already incurred a potential billion-dollar claims liability which, if awarded by the courts — which subsist on taxpayers' dollars — will be added to the bill (for the purchase, storage and distribution of the serum and for printing and processing the papers essential to its administration) which will, of course, be paid with taxpayers' money.

Marijuana should be legalized and saccharin should be banned.

Abortions must be available to every woman who, in the early weeks of a pregnancy, wants one, but hysterectomies must never be done only because a woman wants one.

Too much unnecessary surgery is done in this country and there are too many expensive machines and tests being used to eliminate much of it.

Doctors don't police their colleagues adequately and, in one state, it is a crime not to be an informer. But there must be laws which permit advertising — even fraudulent advertising — because advertising will cause doctors to lower their fees in order to pay their advertising costs. Drug manufacturers should not be allowed to advertise or distribute free samples because it raises the costs of their products.

Lawmakers can prohibit the use of some drugs and allow the use of others. Physicians, but not lawmakers are liable for their use of some drugs and their failure to use others.

Private hospitals which receive delayed payments from the government for services already rendered cannot raise their fees more than the government allows but hospitals owned by the government which receive payments from the government for services not yet rendered can raise their fees as much as necessary to cover their costs.

Surely these examples, even though they represent but a fraction of the total available evidence, are sufficient to prove the diagnosis of governmental insanity — dementia — status *non compos mentis*.

Yet the illness is not the greatest tragedy. Greater are the tragedies that, as a nation of still-rational people, we either cannot recognize dementia or we make no effort to cure it and that, perhaps, our fate as a nation is now being fashioned by a Nero or a Rasputin working unnoticed in some bureaucratic snake pit, preparing the next issue of *The Federal Register*.

MRJ

The debate on National Health Insurance intensifies!

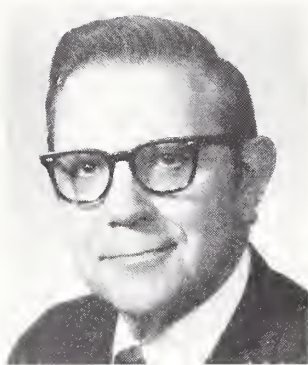
Secretary Joseph Califano has initiated a series of National Health Insurance forums across the nation to hear from the citizenry. Unfortunately, the purpose of the forums is not to determine if the public wants National Health Insurance and is willing to pay for it, rather to "... seek out all views on how a National Health Insurance proposal should be written and what it should include ...". In the background information prepared for the forums, a portion of a campaign speech delivered by President Carter to the Student National Medical Association was quoted,

... We have built a haphazard, unsound, undirected, inefficient, non-system which has left us unhealthy and unwealthy at the same time.

The complex reality is that health care is one strand of a seamless social web. Our nation's health problems must be attacked from many approaches, one of which is National Health Insurance.

Thus the Administration has predetermined that Americans want National Health Insurance and that further reliance upon the existing health care delivery system is foolhardy.

Facts reject the hypothesis of the administration that people want federalized health care and that the existing system is unresponsive. The testimony presented by our Executive Director at the Tulsa National Health Insurance forum refutes many of the allegations against America's health care system. Furthermore, citizens in the forum did not embrace NHI and in fact some spoke vehemently against new social programs that will dip further into the taxpayer's pocket.



The Tulsa County Medical Society's testimony presented at the forum is an excellent study of the physicians' view. The text of both presentations are in a special section of this *Journal*, and I urge you to read them carefully. In addition, there is a special article prepared by a young Oklahoma physician and her lawyer husband on the National Health Service — the system most often regarded as worthy of emulation. This paper brings into proper focus the strengths and the shortcomings of a federalized health care system.

As physicians, we cannot ignore the fact that there are some problems with America's health care system: there are people who are unable, not necessarily for economic reasons, to gain access to the system ... there are those because of their station in life who are unable to purchase adequate insurance coverage ... Likewise, there are populations that are underserved with medical personnel and facilities. The best estimates of all of those who study the system indicate that this group comprises between 10 to 20% of our population — a number that hardly justifies the abolition of a health care system that has produced so much for so many. Somehow we must convince the American people that there are vast economic and philosophical differences between pre-paid health care and pre-paid health insurance. While the one can equitably distribute sickness cost, the other can create an insatiable demand for which we do not have the capacity to supply — nor, in fact, the funds for which to pay.

It is important that you become familiar with and understand the various federalized, socialized, nationalized health schemes, and the special section in this month's *Journal* is an excellent "primer."

C. S. Lewis Jr. M.D.

The Landry-Guillain-Barre'-Strohl Syndrome

MICHAEL A. TRIBBEY, MD,

The Landry-Guillain-Barre'-Strohl syndrome, a disease recently associated with swine-flu vaccination, is a perplexing, yet usually benign illness that is frequently a sequel to common viral infections.

INTRODUCTION

The Landry-Guillain-Barre'-Strohl syndrome is but one name for a rather poorly understood illness of the nervous system; others being acute infectious polyneuritis, polyradiculoneuropathy, idiopathic polyneuritis, Schwannosis, and other less common names. It is a syndrome of unknown etiology characterized by acute or subacute involvement of the peripheral and cranial nerves. A history of a preceding infection is present in the large majority of patients. Prior to 1949 it was felt

that this syndrome was in reality two separate syndromes, namely Landry's ascending paralysis and the syndrome of Guillain and Barre'. It was in that year Haymaker and Kernohan reviewed the literature, published their clinicopathologic review of 50 cases, and proffered the eponym Landry-Guillain-Barre' syndrome¹.

HISTORY

A brief historical review of the Landry-Guillain-Barre'-Strohl syndrome begins with the early report of Landry in 1859². He reported a series of 10 cases characterized by a prodrome of fatigue, tingling or cramps in the distal limb muscles (usually the lower), followed by paralysis which spread rapidly from the lower limbs to involve the upper limbs with a tendency to "generalize." If regression were to occur, it would do so in reverse order. Sensory changes were described as mild in comparison to the motor changes, but on occasion could be equally involved. Death, although occurring in only two of the 10 cases, was the result of involvement of the respiratory musculature with subsequent respiratory failure. On physical examination, Landry found ascending weakness of all four extremities, areflexia, glove-and-stockings type sensory loss, and paresthesia.

Submitted for publication in April, 1977.

Landry's report went unrecognized until 1865 when Pellegrino-levi referred to it and also emphasized that the disorder may originate in the cranial nerves and descend rather than ascend³. It was not until 1876 that Westphal, who reported four fatal cases, coined the term "Landry's ascending paralysis," and probably started the notion that this syndrome was nearly always fatal⁴. In 1880 Leyden clearly differentiated between Landry's ascending paralysis and acute poliomyelitis⁵.

In 1891 Quinke introduced the technique of lumbar puncture and cerebrospinal fluid examination⁶. This paved the way for Guillain, Barre', and Strohl, who in 1916 reported the use of this new technique in their examination of two cases characterized by rapidly ascending paresis or paralysis, greater distally than proximally, hypo- or areflexia, paresthesias of the glove-and-stocking type, and an increase in the cerebrospinal fluid protein (albumin) without an increase in cellular elements⁷. Both patients recovered rapidly. It was their opinion that the CSF changes and the benign outcome were very significant and that this differed from the syndrome of Landry. It was not until 1927 that the term Guillain-Barre' syndrome was used by Dragenescu and Claudian, who apparently failed to recognize the work done by Strohl in the original report of Guillain, Barre', and Strohl of 1916⁸.

During the period 1916 to 1936 Guillain and Barre' stoutly refused to include fatal cases or cases that did not reach their CSF criteria under the name Guillain-Barre' syndrome, but with pressures from other workers in the field they gradually relented and allowed other fatal cases to be classified under their name. In 1938, Guillain, while at a symposium on the subject in Brussels, stated that, on occasion, his syndrome might be fatal, much as the same as chickenpox, which also has a favorable prognosis but is occasionally fatal⁹.

It is not until 1949 that the dispute concerning Landry's ascending paralysis and the Guillain-Barre' syndrome began to be clarified by the report of 50 cases and a critique of the literature by Haymaker and Kernohan¹. It was their feeling that these two syndromes were simply variants of the same pathologic process, with Landry's ascending paralysis being the more malignant presentation. They felt that the disorder was characterized by a poly-

radiculoneuropathy which could begin in any peripheral neurons, spinal or cranial, circumscribed or widespread, might affect predominantly the motor or the sensory neurons or both to the same degree; could remain essentially a radicular disorder or could extend into the central nervous system at any point, and either ascend or descend, the outcome usually being dependent on the degree of involvement of respiratory or cardiac nerves. Changes in the amount of protein and the number of cells in the spinal fluid were regarded as incidental to the disorder.

Most of the work since 1949 has dealt with investigation of possible causative agents and the pathogenesis of this disease. Possible causative agents that have been implicated include hepatitis, infectious mononucleosis, an agent causing feline enteritis, Echovirus, Coxsackie virus, the Epstein-Barr virus, and others, none of which have proved to be the sole agent. In 1955, Waksman and Adams pointed out the similar clinical appearance and pathologic findings between the Landry-Guillain-Barre'-Strohl syndrome and experimentally induced allergic neuritis¹⁰. It was in 1956 that Everts restored Strohl's name to the syndrome in honor of his work with Guillain and Barre' in 1916.¹¹ Somewhat later, possible immunologic causes for this syndrome began to be investigated, with Melnick, who in 1963, reported finding antibodies to nervous tissue in 19 of 38 patients with Guillain-Barre' syndrome.¹² In 1964 Wiederholt reviewed the literature, reported on 97 patients, and discussed the possibility of an allergic origin to this disease¹³. Finally in 1969 Asbury, Arnason and Adams reexamined the pathologic lesion found in idiopathic polyneuritis and felt that this was consistent with the lesions found in experimental allergic neuritis (EAN).¹⁴

CLINICAL OBSERVATIONS

Incidence

This disorder may affect any age but is more common in the third and fourth decades of life;^{1, 15} however, Wiederholt in his report of 1964 felt that the occurrence of this disease was highest in the first decade of life and much lower in the second, subsequently increasing in incidence to another peak in the sixth decade.^{13, 16} It has been stated that there is no racial preference.^{1, 13, 15, 16} The syndrome ap-

pears to be somewhat more common in males with reports varying from a ratio of slightly more than 1:1 to almost 2:1.^{13, 15-17} The disorder displays no seasonal incidence, but may occur slightly less often in the summer and fall.^{1, 13, 15, 16} No geographical area has been noted to have a significantly higher incidence.

Prodrome

Previous systemic or local infections occur in the great majority of patients.^{1, 13, 15, 16} Haymaker and Kernohan reported previous infections in 80% of their patients.¹ No single specific disease has been identified with this syndrome, but rather this syndrome has been described as sequelae of such entities as hepatitis, infectious mononucleosis, influenza, upper respiratory tract infections and many others. Whatever the prior episode, it has usually subsided by the time of the onset of the neurologic symptoms and almost always after the pyrexia of the prodromal episode.¹⁸ This latent period ranges from one to 28 days with a mean of nine days.¹⁷

It is of current significance to note that a syndrome indistinguishable from the Landry-Guillain-Barre'-Strohl syndrome has been reported after childhood exanthems and after immunizations, most recently the immunization for swine-flu.

Mode of Onset

In the majority of patients, symptoms begin in the limbs with greater than 50% of the patients complaining of numbness, paresthesias, or pain. About 40% complain of weakness or paralysis in the extremities as their initial complaint. In the remainder of patients, the onset is atypical with such complaints as abdominal pain or cranial nerve involvement.¹

If the initial symptoms are sensory in nature, they are virtually always distal and in a glove-and-stocking distribution. An exception to this rule is pain, which is most often experienced proximally.¹ Paresthesias are more localized at first, whereas pain tends to be less well localized but more often encountered in the legs and lower trunk than elsewhere.¹ Paresthesias consist of formication, tingling, and numbness, but hyperesthesia and hyperalgesia have been reported in 5-10% of the cases.¹ Muscles tender to palpation are seen in approximately one-third of the cases.^{1, 13}

When weakness or paralysis is the initial

symptom, it begins most frequently in the lower limbs. This occurred in greater than 50% in most series.^{1, 13, 15, 16, 18-20} About 15% of the time it began in the upper extremities and with the same incidence in the cranial nerves.^{1, 13} Weakness is often insidious in onset¹⁸ but on occasion can strike quite suddenly.^{1, 13, 15, 16, 19} Weakness is often generalized at first but after a variable period of time, usually hours, paralysis can be detected in either the upper or lower limbs, or in the cranial nerves.^{1, 13} Haymaker and Kernohan reported that when the site of paralysis was the lower limbs, it was more often proximal than distal whereas in the upper limbs, it was more often distal.¹ Regardless of the location, the paralysis is of the flaccid type and is symmetric in distribution.^{1, 13, 15-20} Fasciculations have been observed but are considered to be rare.^{1, 13} Abdominal pain was the presenting complaint in three of the 50 cases reported by Haymaker and Kernohan.¹ On physical examination the deep tendon reflexes are either absent or decreased while the cutaneous reflexes are unaffected.^{1, 13, 15-21} Babinski sign is rarely present and if so is usually due to some other cause.^{1, 13, 15-21} Ataxia, manifested by swaying, staggering gait, or dysmetria, has been observed in up to one-fourth of the cases.^{1, 15}

Course

The course of this disease can be quite diverse. In general the lower limbs are affected first, followed by the upper limbs, then the cranial nerves, trunk, or intercostals.^{1, 13, 15-20} Occasionally, symptoms will begin in the cranial nerves and progress to involve the limbs and trunk. Cranial nerve involvement occurs in greater than 50% in most series.^{1, 15-19, 21} The cranial nerves that are most frequently involved are the facial, glossopharyngeal, vagus, accessory, trigeminal, oculomotor, trochlear, and abducens, in that order.^{1, 15, 21} Involvement of the optic nerve in the form of papilledema has been reported but is not common. Involvement of the vestibulocochlear nerve is extremely rare and should raise doubt as to the diagnosis of the

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syndrome. Facial nerve paralysis is most often bilateral, although frequently one side is affected to a greater degree and may be involved earlier than the opposite side.¹⁸ It is important to remember that the advent of facial paralysis, especially if bilateral, in the course of a lower motor neuron disease is highly suggestive of the Landry-Guillain-Barre'-Strohl syndrome. It is also mandatory to be vigilant in observing for laryngeal, palatal, or pharyngeal paralysis, for these often denote the impending onset of respiratory insufficiency.

Autonomic disturbances have been reported in greater than 25% of the patients in most series.^{1, 16, 22, 23} This is usually in the form of urinary retention or incontinence, but such symptoms as postural hypotension, diaphoresis, tachycardia, flushing, and hypertension have been reported.^{1, 15, 22} Lichtenfeld divided autonomic disturbances into excessive or insufficient sympathetic or parasympathetic activity.²² Greater than 60% developed hypertension, which often fluctuated, with levels up to 260/110.²² He reported agitation, irrational behavior, and delusions accompanying some of these hypertensive episodes.²² In four of his 28 cases he noted the sudden onset of profuse diaphoresis and peripheral vasoconstriction while the patient was normotensive.²² Two of these four patients died during the episode.

Meningeal signs can occur as evidenced by the infrequent occurrence of a stiff neck and a positive Kernig's sign.¹ In 73 instances of non-fatal Landry-Guillain-Barre' syndrome reported by various authors in the 1938 volume of the *Journal belge de neurologie et de psychiatrie*, symptoms of meningeal involvement occurred in 21.

Death, should it occur, is usually the result of infection or respiratory insufficiency, although other causes may ensue.

Laboratory Data

Laboratory studies are often non-specific for this disorder. Peripheral blood studies reveal no characteristic pattern and blood chemistries are usually normal unless some other disease process is concurrent.^{1, 15-23} Serologic studies are of no value in this syndrome.^{1, 13, 15-17, 21} Bacterial and viral cultures are also of no diagnostic aid.

Urine has usually been described as normal, but recently, evidence of the nephrotic syndrome and acute glomerulonephritis in the form of hematuria, proteinuria, and granular or red blood cell casts have been reported.^{24, 25} In 1973, Rodriquez, *et al* reported nine cases of Guillain-Barre'-Strohl syndrome of which all nine had evidence of acute glomerulonephritis, and of which eight had histologic evidence of acute glomerulonephritis by renal biopsy.²⁴ Immunofluorescence studies have revealed both linear and granular deposition patterns which may be the result of antigen-antibody complex formation with deposition along the basement membrane.²⁵

Examination of the CSF is often done in this syndrome but there are no definite, consistent abnormalities found that are specific for the Landry-Guillain-Barre'-Strohl (LGBS) syndrome. The CSF opening pressure is often mildly elevated, from 200 to 300 mm.¹⁵ Xanthochromia and Froin's syndrome have been reported.^{1, 18} Cerebrospinal fluid glucose and chloride content are usually normal. Elevation of the spinal fluid protein, without a concomitant increase in the number of cells present (the so-called albuminocytologic dissociation), is most commonly observed two to three weeks after the onset of the neurologic symptoms.^{1, 13, 15-23} Protein levels are frequently in the 50 to 200 mg/dl range, but levels as high as 1000 mg/dl are not uncommon. The maximal height of the protein concentration apparently has no relationship to the duration or the severity of the syndrome, but the concentration tends to remain elevated in those cases with a more chronic course.^{13, 15, 26} Cerebrospinal fluid protein electrophoretic patterns have revealed no specific abnormalities, although beta-globulin is often decreased and gamma-globulin is often increased.¹³

Electrodiagnostic studies have shown reduced or absent response to faradic stimulation, a reduction in the number of motor unit potentials of normal shape and amplitude, and a slowing of nerve conduction velocity with prolonged distal latency.^{18, 27} The average time lag between the onset of the illness and the first electromyographic (EMG) changes is about two weeks.²⁷ Raman and Taori have divided the LGBS syndrome into two separate patient populations on the basis of their EMG findings.²⁷ The first group, which has a good prognosis, is one in which fibrillations are lacking, the primary lesion appearing to be de-

myelination with minimal axonal damage; the second group, which has a poorer prognosis, is characterized by profuse fibrillations, probably reflecting significant axonal damage.²⁷

Prognosis and Therapy

Therapy consists basically of good nursing care and vigilant observation for respiratory insufficiency. Urinary retention or incontinence may require the use of an indwelling catheter or urecholine. Physical therapy, at first consisting of passive range of motion exercises with progression to active exercises, is advocated by most.^{15-17, 20} Use of a respirator is indicated when respiratory insufficiency supervenes. Steroid therapy is controversial, and at this time, the use of steroids is not felt to be indicated for initial cases of the syndrome but rather for the chronic or relapsing cases.^{23, 28}

The average length of hospitalization varies with the clinical severity, ranging from six to 101 days in one series,¹⁶ and a mean of 75 days in another.¹⁹ Around 10% of the patients require the use of respirators, but one series reported this necessity in one-third of their patients.¹⁶ The mean duration of time on respirators is four to five days, occasionally longer.¹³ In general, the disease takes one to three weeks for progression of the illness to the maximal deficit, then, there is a period of stabilization lasting one to two weeks usually followed by a variable period of recovery lasting up to two years or more.¹³ In most series, greater than 50% of the patients completely recover to resume their previous activities, the remainder usually having some mild to moderate deficit such as distal or facial weakness resulting from atrophy.¹⁹ Pleasure, *et al* found that greater than 50% of their 49 patients with the syndrome, followed an average of 11 years, retained some evidence of damage to the peripheral nervous system.²⁹ They found no correlation between persistence of deficit and age, speed of progression, objective sensory loss, papilledema, CSF pleocytosis, or steroid therapy.²⁹ On the other hand, Oppenheimer and Spalding felt that if at the end of a month movement is already returning to the distal parts of the limbs, then the outlook for complete clinical recovery is good; if recovery was gradual, slowly spreading from proximal to distal musculature, and had not reached the distal parts at the end of a year, then the prognosis for complete recovery was quite poor.³⁰ Whatever the deficit remaining, proper orthopedic ap-

pliances such as footdrop braces, long-leg braces, or crutches may have to be used. The death rate in the past has been as high as 40%, but the figure is now felt to be much lower due to the earlier use of respiratory assistance and more vigilant observation for autonomic disturbances.

Diagnosis

In 1936, Guillain set forth what he felt were the main features of the disease. These have subsequently been revised by others, but they include 1) an onset of paralysis, paresthesias, pain, or all three with or without premonitory symptoms such as pharyngitis, malaise, etc., 2) motor disturbances leading to flaccid paralysis of the muscles of the lower limbs, and later the trunk and upper limbs, chiefly affecting the distal muscles, 3) occasionally fibrillary twitching, 4) occasional atrophy of distal muscles, 5) ataxia, 6) abolition of the tendon reflexes in the paralyzed muscles, 7) subjective sensory disturbances, and 8) transient cranial nerve palsies.³¹

In 1960, Osler and Siddell published twelve criteria which should be considered in the diagnosis of the Guillain-Barre' syndrome.³² They are: 1) the syndrome usually beginning one to three weeks after an infection, most often respiratory, the exanthems occasionally being the precipitating cause, 2) occurring in all ages, both sexes, and the patient being afebrile on admission, 3) dysesthesias of the hands or feet or both usually precede the onset of paralysis, 4) rapid onset of symmetrical loss of power, frequently proximally, (symmetrical denoting distribution and not severity), 5) an objective sensory loss that is minimal and transient, in a glove-and-stocking distribution, typically variable during the day, 6) no direct or severe involvement of the bladder, but there may be transient disturbances, 7) diminution or loss of tendon reflexes, 8) frequent involvement of the cranial nerves, most frequently the seventh, often bilaterally, 9) improvement beginning before the third week, continuing without relapse, 10) the CSF always showing a rise in protein, without any marked rise in the number of cells (they felt that a cell count over 10 per cubic millimeter should raise doubts of the diagnosis), 11) complete functional recovery without residuae in six months, 12) if examination reveals the presence of abnormalities other than the above, then one should suspect some

other form of polyneuritis or the presence of a complicating disease.³² As one can see, these are fairly strict criteria and often one does not follow these criteria exactly.

Differential Diagnosis

The diverse character of symptoms in acute polyneuritis or the LGBS syndrome often poses challenges in early diagnosis. Conditions that must be differentiated are:

1) Poliomyelitis — which has a febrile course, an absence of sensory findings, irregular distribution and severity of muscle involvement, frequent meningeal signs, CSF pleocytosis, and a definite seasonal pattern often associated with outbreaks.

2) Postinfectious encephalomyelitis — which often has an alteration in sensorium, a febrile course, occasional convulsions, spinal sensory levels, long tract signs, and early and severe bladder dysfunction.

3) Epidural abscess — in which fever, pain, leukocytosis, percussion tenderness over the spine, and demonstration of a spinal fluid block are the striking features.

4) Acute porphyria — which is suggested by psychic aberration, abdominal pain, progressive muscle impairment, occasional family history, and the demonstration of porphobilinogen in the urine.

5) Postdiphtheritic paralysis — in which oculomotor palsy, blurred vision, delayed and slowed development of sensory-motor involvement of the extremities occur and is supported by the development of myocarditis and culture of the bacillus.

6) Carcinomatous polyneuropathy — in which there is usually a subacute course. This diagnosis requires the demonstration of a coexisting malignancy.

7) Alcoholic nutritional polyneuritis — defined by the history, poor nutritional state, skin changes, burning paresthesias of the feet, normal spinal fluid protein, postural hypotension, ophthalmoplegia and nystagmus such as in Wernicke's disease.

8) Hysteria — in which anatomically and physiologically inconsistent motor and sensory changes, elucidations of gain from illness, and a normal CSF examination are suggestive.

Other syndromes that should be considered include: botulism, myasthenia gravis, and polymyositis.

Clinical Forms

Cases of the Guillain-Barre' syndrome may be divided according to distribution, symptoms, course, age and general condition of the patient, or mode of onset.¹⁸

1; distribution — a) the *paraplegic form* is the commonest and the most benign, b) the *quadriplegic form* in which the legs are affected more than the arms, c) the *spinal-mid-brain form* which affects the whole body and carries the grave risk of respiratory insufficiency, d) the *midbrain form* which is characterized by affection of one or more cranial nerves without paralysis of the limbs as identified by Guillain and Kreis, and e) the *mononeuritic form* which is rare.

2) symptoms — a) the *hyperalgetic form* with headache, backache, myalgia, and elicitable meningeal signs, b) the *acrodynic form* which usually occurs in young children and is characterized by pain and vasomotor reactions in the extremities, burning paresthesias, erythema, edema, hyperhidrosis, tachycardia, hypertension, and mental features such as insomnia, anxiety, and irritability, c) the *pseudo-myopathic form* in which the brunt of the disorder falls upon the proximal limb segments, d) the *pseudo-myasthenic form* which is seen in predominantly midbrain involvement in which the facies are mask-like and in which ptosis and ocular fatigue recall myasthenia, e) the *ataxia form* which may be fairly common and characterized by a deficit of deep sensibility soon followed by paralysis, f) the *papilledematous form* which is rare, and g) a form characterized by total external ophthalmoplegia, ataxia, and loss of tendon reflexes as described by Fisher in 1956, the so-called *Miller Fisher variant*.³³

3) course — a) a *fulminating form* in which paraplegia develops in 24 to 48 hours and progresses swiftly to quadriplegia, b) a *protracted form* in which invasion is slow, the fully developed phase prolonged, and regression slow, c) the *recrudescant form* which runs a prolonged course in which phases of aggravation alternate with phases of apparent partial remission, (whether this form actually exists is questionable), and d) a *recurrent form* in which motor or

sensory impairment reappears after more or less complete recovery.

4) age — a) *children* in whom the onset is often sudden with circulatory and vasomotor disturbances, b) *adults*, c) *pregnant women* in whom careful observation is mandatory.¹⁸

As can be readily seen, there is a great deal of overlap between these various forms.

PATHOLOGY

Pathological changes in this syndrome are found most frequently in the peripheral nervous system but are by no means confined there. Changes may also be found in the central nervous system, the leptomeninges, and other tissues.^{1, 14}

In the peripheral nervous system, the changes are most often found proximally and consist of vascular engorgement, edema, myelin and axis cylinder degeneration with phagocytosis of the debris by histiocytes, and Schwann cell proliferation. Inflammatory cells, usually lymphocytes, have been found in the affected portions of the peripheral nervous system, usually nerve roots and not infrequently the dorsal ganglia, at various stages of the disorder.¹ Asbury *et al* later stressed the lymphocytic infiltrate as being characteristically clustered about small endoneurial and epineurial vessels, particularly veins, but in a random multifocal manner.¹⁴ Although Haymaker and Kernohan stressed the presence of edema in the early stages of the disease, Asbury recognized no pre-inflammatory or edema stage.^{1, 14} All levels of the peripheral nervous system are vulnerable to attack, including the anterior and posterior roots, ganglia, proximal and distal nerve trunks, cranial nerves, and the sympathetic chain, but in general, the site of maximal involvement correlates with the clinical findings.¹⁴ Segmental demyelination was the predominant form of nerve damage, occurring in zones corresponding to the inflammatory infiltrate. In addition, axonal interruption and consequent Wallerian degeneration was observed frequently, especially where the inflammatory infiltrate was most intense.¹⁴ According to Haymaker and Kernohan, the earliest change one observes in the peripheral nervous system is edema which occurs in one to four days.¹ This is followed by degenerative changes in the myelin sheath and axon on the fifth day which continue to become more severe as the illness progresses. A scattered lymphocy-

tic infiltrate appears on the ninth day with phagocytosis and Schwann cell proliferation appearing on the eleventh day.¹ This follows the thoughts of Asbury *et al* on the pathologic process quite well except for the edema stage.¹⁴ In addition, Asbury went on to propose that the earliest change in the myelin sheath was retraction at the node of Ranvier, and in more developed lesions, the axon might be denuded over long stretches.¹⁴ He also concluded the Schwann cell proliferation to be a reparative process.¹⁴ Finally, Asbury *et al* proposed that the LGBS syndrome might be the result of an allergic process on the basis of its pathologic resemblance to experimental allergic neuritis (EAN).¹⁴

ETIOLOGY

That the LGBS syndrome is the result of a direct effect of some agent such as a bacterium or virus, is largely discarded now. This is not to say that they don't play an indirect role in the pathogenesis of the syndrome. Recognition of the similarities between the LGBS syndrome and experimental allergic neuritis has been growing in recent years. This began in 1955 when Waksman and Adams produced allergic neuritis in rabbits by injecting extracts of peripheral nervous tissue and adjuvants.¹⁰ In 1963, Melnick found serum complement-fixing antibodies to nervous tissue in 19 of 38 patients with Guillain-Barre' syndrome; however antibodies to the same antigen were found in patients with demyelinating diseases of the central nervous system and a wide group of non-neurologic disorders.¹² Caspary *et al*, in 1971, found lymphocytes sensitized to basic central nervous system protein and to protein derived from human sciatic nerve in 16 patients with the syndrome.³⁴ This has subsequently been confirmed by many others.³⁵ Thus, the evidence is still accumulating that the LGBS syndrome develops when lymphocytes become sensitized to peripheral nerve protein and attack peripheral nervous tissue for unknown reasons. Meanwhile, research into the humoral factors of immunity has not ceased and in 1975, Huang reported that the serum levels of IgE was significantly elevated in about half of patients with acute LGBS syndrome, and that these levels tended to fall with clinical improvement.³⁶

SUMMARY

The Landry-Guillain-Barre'-Strohl syn-

drome is an acute neurologic entity with varied clinical forms, usually presenting as numbness or weakness in the lower extremities with progression to involve the other limbs and cranial nerves. Other forms of presentation can occur. In the vast majority of cases, the syndrome follows a prodromal infection of some type. The disease is usually benign, but deaths have occurred due to respiratory insufficiency, cardiac arrest, and infection. Complications are not infrequent and consist of thrombo-embolic accidents such as phlebitis and pulmonary embolism, infections of the lungs or urinary tract and others.¹⁸ There is no specific therapy other than good nursing care and vigilance, especially for respiratory insufficiency. Assisted respiration may be necessary for a short period of time. Residuals are usually not a problem and are usually mild in nature. Recovery can be quite prolonged.

Currently, the disease is thought to be the result of an immunologic accident, the nature of which is probably cellular or delayed hypersensitivity. The role of humoral antibodies is unclear. The frequent incidence of a prodromal infection or of immunizations implies an indirect role of these agents. Current investigations of this syndrome are in these areas.

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Villous Tumors of the Duodenum

(Also Case Report)

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Comfortable living is possible following a total colectomy (except rectum), gastric resection (50%), pancreatectomy (50%), complete duodenectomy, cholecystectomy, hysterectomy, bilateral salpingo-oophorectomy, and removal of recurrent adenomatous polyps from the rectum.

Villous adenomas (tumors) of the duodenum reviewed in the world literature total 45. This retrospective study reviews case records of the 14 patients with malignancy and an update follow-up report of their condition at the present time. The remaining 31 benign cases have been summarized as to age, sex, symptoms, location of lesion and treatment. Also presented is a case history of a patient who had a hysterectomy and bilateral salpingo-oophorectomy for tuberculosis of the fallopian tubes and peritoneum, total colectomy for multiple polyposis, small bowel obstruction due to adhesions, and then eighteen years later developed an invasive adenocarcinoma in a villous adenoma (9 × 7 cm) in and about the ampulla of Vater. (Fig I)

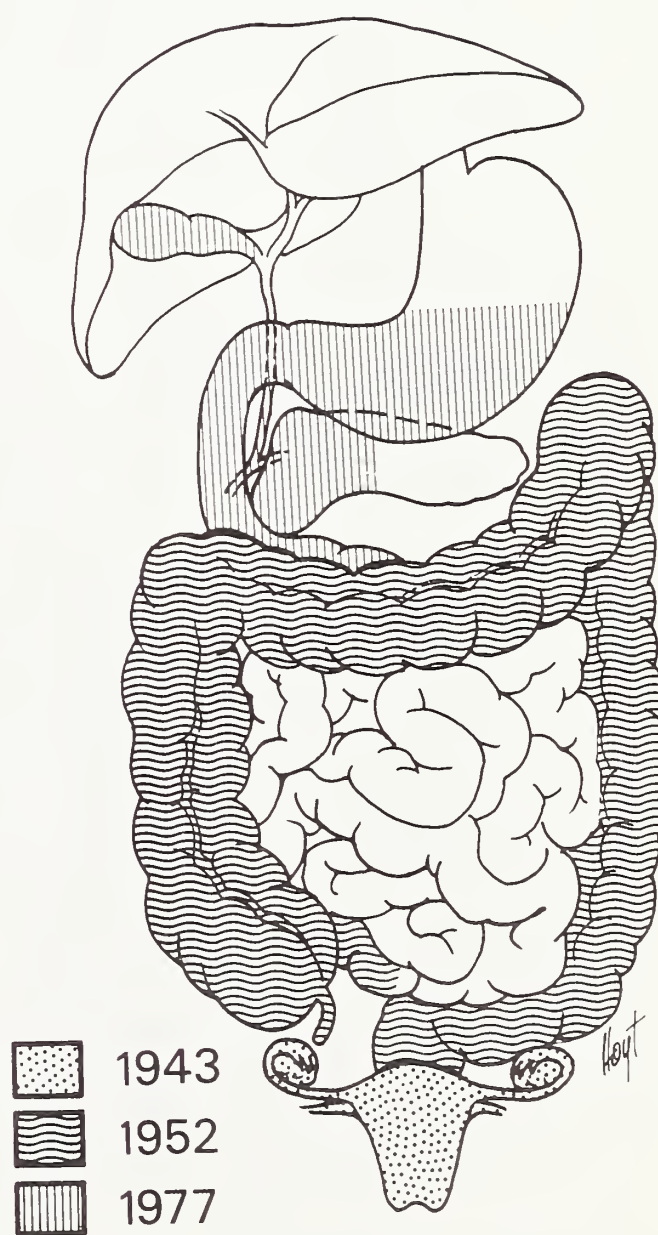


Fig. I. Surgical Procedures: 1943 Hysterectomy and bilateral salpingo-oophorectomy; 1952 Total colectomy; 1977 Pancreatoduodenectomy and cholecystectomy.

CASE REPORT: A 57-year-old white woman was admitted to St John Medical Center on December 29, 1976 complaining of epigastric and right upper quadrant pain that began three days previously. She also had noticed gray-colored stools, dark urine and jaundice. At age 18 years the patient had had pulmonary tuberculosis for which she was treated in a sanitarium for six months. Six years later, in 1943, she had a hysterectomy and bilateral salpingo-oophorectomy for uterine bleeding and tuberculosis of the fallopian tubes, associated with tuberculous peritonitis. (Fig. I) In 1952 a total colectomy for multiple polyposis was done by Drs Good and McNeil of Dallas, Texas. (Fig. III) Adhesions caused a complete small bowel obstruction in 1958 for which she was operated at St John Medical Center in Tulsa, Oklahoma. Subsequently she had two admissions to the hospital for partial small bowel obstruction but these were treated conservatively. Several

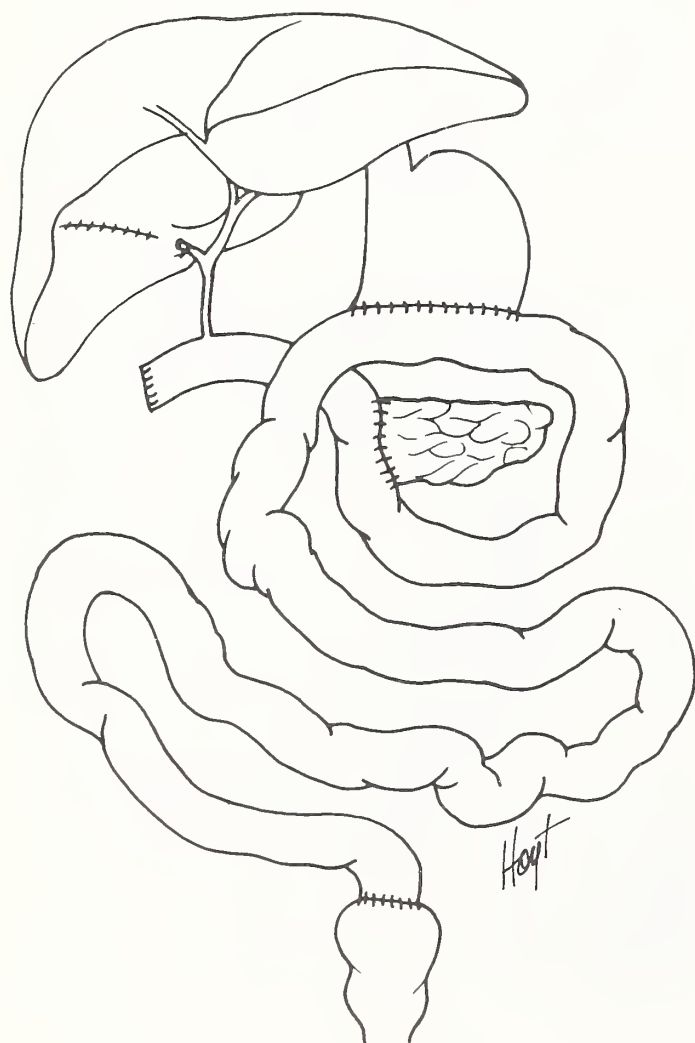


Fig. II Current Status: End-to-side choledochojejunostomy, pancreaticojejunostomy. Absence of gallbladder, duodenum, pancreas (50%), stomach (50%), total colon, uterus, fallopian tubes and ovaries.

small polyps were removed from the remaining rectum in October 1976. The family history was remarkable in that a brother had colonic cancer and her father had had tuberculous meningitis.

Physical Examination: The patient was well developed, well nourished, cooperative and intelligent. She was 5'3" in height and 119 pounds in weight. The only significant physical findings were tenderness over the right upper quadrant and jaundice.

Laboratory Findings: Upper Gastrointestinal series showed a large mass involving the descending duodenum and causing expansion of the duodenum. Chest x-ray revealed probable chronic atelectasis of the right upper lobe plus right pleural calcification. The left lung was expanded. The electrocardiogram was normal. The hemogram was essentially normal. The urine was dark and tests for bile, blood and ketones were positive. The alkaline phosphatase was 1200u/l (30-115u/l), total bilirubin 7.0 mg/dl (0.2-1.0mg/dl), direct bilirubin 3.7 mg/dl (0-0.4mg/dl).

Surgery: Abdominal exploration was performed on January 3, 1977 through a transverse subcostal incision. Exploration revealed that the small intestine was matted by numerous adhesions. The gallbladder was distended. Duodenotomy permitted visualization of a large velvety-soft fungating lesion. In the center of this tumor, at the papilla of Vater, was an elevated nodule of firm reddish-brown tissue. Study of a frozen section biopsy revealed invasive adenocarcinoma at the ampulla of Vater. Pancreatoduodenectomy and cholecystectomy were performed after determining that sufficient jejunum could be brought up for anastomosis to the common bile duct, duct of Wirsung and remaining stomach. (Fig II) Her post-operative course was complicated, in that she

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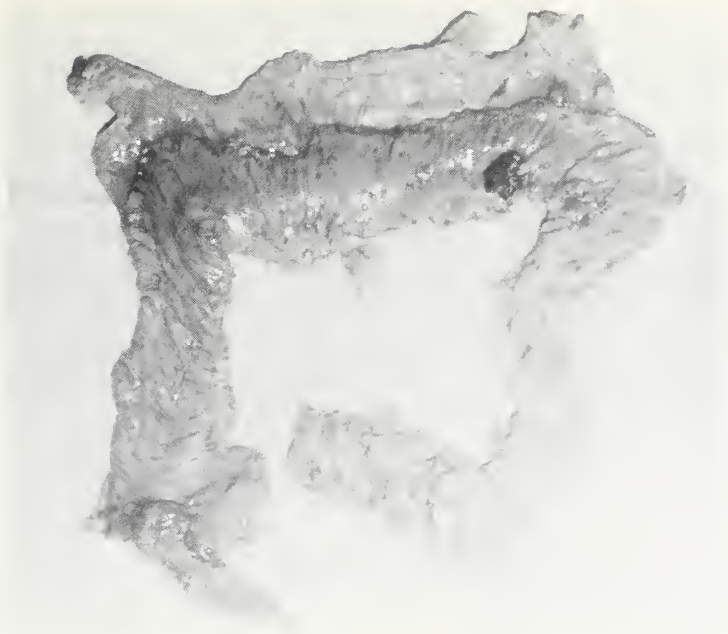


Fig. III. Total colectomy specimen from 1952 in which numerous polyps are seen. Note large polyp in left transverse colon.

had an unexplained gastrointestinal hemorrhage two weeks after surgery. One month later the patient left the hospital in good condition.

Pathology Examination: The tissue specimen consisted of a portion of stomach, duodenum, and pancreas with overall measurements of 25×7 cm. The serosal surface of the stomach and duodenum were smooth and glistening. The attached pancreatic portion of the specimen measured 9×4.5 cm and present in this region was a dilated common bile duct with a diameter of 1.5 cm. When opened a 9×7 cm soft sessile, fungating mass was found at a point 7 cm from the pylorus. (Fig IV) An elevated 2.6 cm nodule of firm, reddish-brown tissue was present along the proximal border of



Fig. IV. Photograph of the surgical specimen opened to show, from the right, the stomach, pylorus, duodenum and large villous tumor with dark nodule of malignancy.

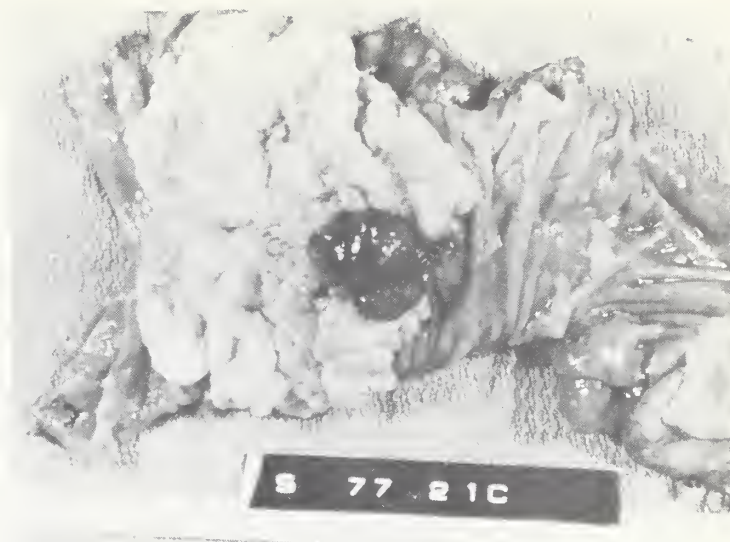


Fig. V. Closer view demonstrating the 2.6 cm adenocarcinoma on the proximal portion of the villous tumor at the ampulla. Smaller adenomatous polyps are present on the duodenal mucosa.

the lesion, which was found to be at the ampulla. (Fig. V) Dissection through the nodule revealed obstruction by tumor of the common bile duct as well as the pancreatic duct. The remaining duodenal mucosa contained several smaller polypoid excrescences measuring up to 1.5 cm. These were soft, sessile, and relatively poorly delineated. *Microscopically* the specimen showed a villous tumor with an infiltrating adenocarcinoma present at the ampulla. (Fig VI & Fig VII) The smaller polypoid excrescences were hyperplastic and adenomatous polyps. All lymph nodes were negative for metastases.

Follow Up On Case Report: Five months after surgery the patient had a persistent elevation of alkaline phosphatase at 234u/l (30-115u/l). All other laboratory findings were normal, including blood sugar, bilirubin, electrolytes, and a bone scan. Physically she appeared well and happy, has returned to her preoperative weight of 119 pounds, and was enjoying normal activity.

Four small adenomatous rectal polyps (non-malignant) were removed through the sigmoidoscope four months postoperatively. She eats four or five times daily and has two to three bowel movements during the day. At the present time she enjoys traveling over the country and is free of complaints.

INTRODUCTION & MATERIAL

In 1962 Moersch, Woolner and Claggett described the first in situ adenocarcinoma of a villous tumor of the duodenum.²⁸ Now that 45

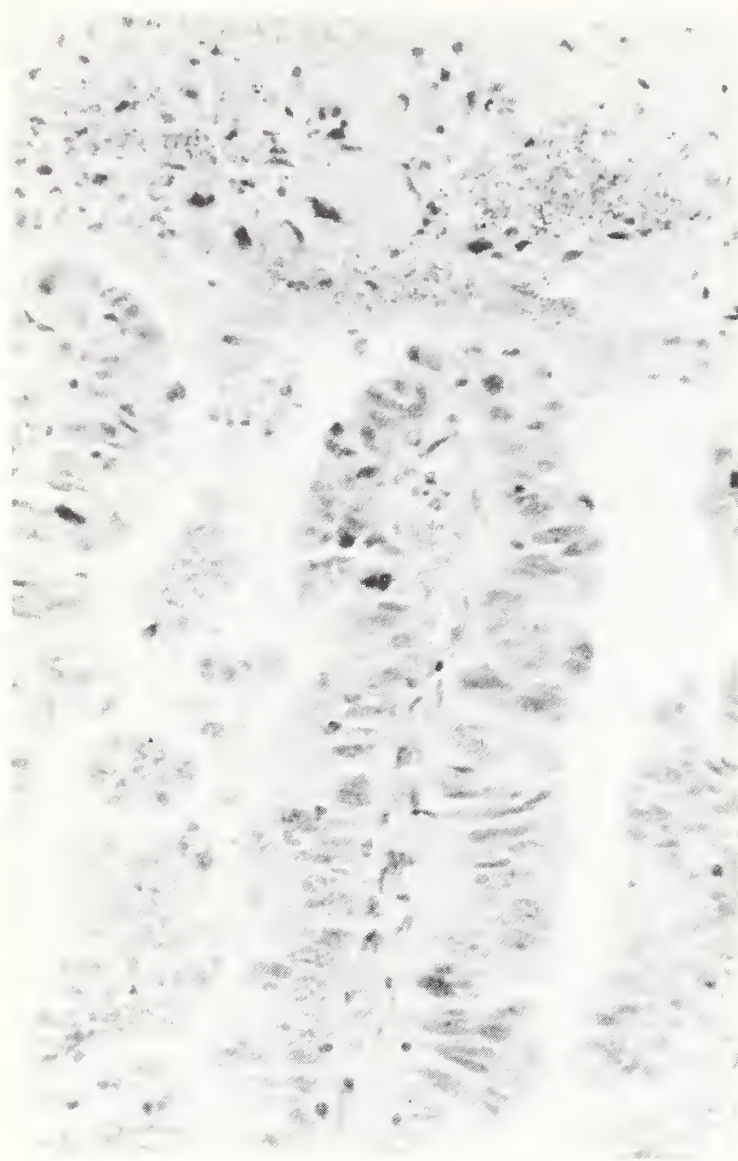


Fig. VI. Photomicrograph of villous fronds.

duodenal villous tumors have been reported, a statistical survey is warranted.

Personal communication with many of the authors brings us up to date on the follow-up results. Three of the six cases reported by Ring *et al*,³² have been deleted from this review for the following reasons: 1. Case No. 1 was a tumor derived from the stomach; 2. Case No. III was a villous tumor of the jejunum, as reported by Dr A. E. James;¹⁶ 3. Case No. VI was reported separately by Dr Dayal *et al*.⁶ This has been confirmed by personal communication with Dr Ring. Also deleted was a tumor of the stomach reported by Waters in 1930⁴¹ and a papillary adenoma reported by Bookman in 1930,³ as they do not appear to have the villous characteristics.

SEX AND AGE DISTRIBUTION

Sex distribution was 26 females (60%) and 18 males (40%); ages ranged from 18 to 76 years

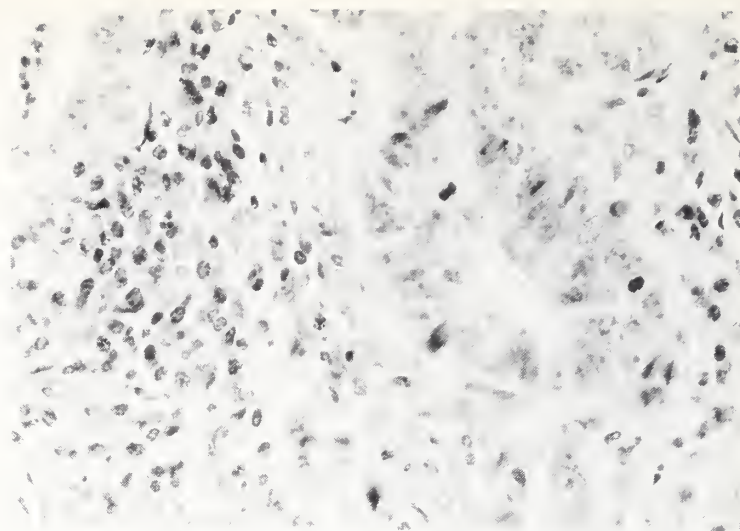


Fig. VII. Photomicrograph of invasive adenocarcinoma at the ampulla exhibiting bizarre neoplastic cells and mitoses.

with an average of 57 years; 35 patients were 50 years or older. The average age of the patients with non-malignant tumors was 55 years, ranging from 18 to 76 years. The average age of patients with malignant tumors was 65 years, ranging from 56 to 74 years.

LOCATION

We no longer have to speculate on the distribution of these growths in the various parts of the duodenum. Approximately half (22-50%) of the tumors were found in the second part. Eight of the 14 malignancies were in the second portion (57%); three in the third; and one in the fourth. (Table I) Six of the non-malignant tumors were considered to be in the second and third portions with six of the others in the second portion alone. (Table II) Of the 13 in the proximal duodenum, two were malignant and eleven non-malignant. Villous tumors in part four are rare. All this may be suggesting that the emptying of the bile and pancreatic juice may act as an initiative stimulus for the production of these tumors as well as influencing the development of carcinomatous changes.

SIZE OF LESION—CARCINOMA AND HEMORRHAGE

Several of the tumors were pedunculated but most were soft, sessile, and relatively poorly delineated. In Tables I and II it will be noted that the size of the lesion may not play a part in its being malignant or non-malignant. The largest tumor, 10 × 10 cm, Fuller *et al*¹⁰ was not malignant as were many others that were only slightly smaller. It is an accepted fact that the larger the tumor the more likely it is to be

TABLE I
MALIGNANT VILLOUS ADENOMAS OF DUODENUM

No. Author	Age (yr) & Sex	Symptoms	Loc.	Pathology	Treatment	Remarks
1. Moersch, Woolner & Claggett (28) 1962	67, F	Obstruction	1	Carcinoma in situ 7.6 cm	Resection Billroth III	Alive 16 yrs.
2. Schorsch & Guitierrez (34) 1965	72, M	Anemia	1	Focal carcinoma 5.6 cm post mortem	Excision	Died 5th post-op day-metastasis serosa stomach & liver surface
3. Meltzer, Ostrum & Isard (25) 1966	69, M	Jaundice	2	Invasion-large attached to ampulla	Pancreato- duodenectomy	Recovery-surgery No follow-up
4. Meltzer, Ostrum & Isard (25) 1966	60, M	Jaundice	2	Micro invasion	Local excision	Well 5 yrs.
5. Deucher & Villiger (7) 1968	58, M	Jaundice & anemia	2	Invasion	Pancreato- duodenectomy	Recovery 10 yrs.
6. Deucher & Villiger (7) 1968	63, F	Jaundice & anemia	2	Invasion	Pancreato- duodenectomy	Recovery 14 yrs.
7. Dwyer & O'Brien (8) 1970	73, F	Obstruction	3	Invasion-metastasis 2 lymph node	Resection, duodenojej- unostomy	Died-2 yrs. metastases
8. Steinberg & Shiever (40) 1972	67, F	Bleeding	3	Focal carcinoma	Excision	Well 7½ yrs.
9. Dayal, Bass, Kraft, Glotzer & Goldman (6) 1972	56, F	Epigastric pain, weight loss	2	Invasion 5×5 cm	Pancreato- duodenectomy	Well 4 yrs.
10. Faust, Hartweg & Eugenidis (9) 1972	74, M	Jaundice	2	Invasion with liver metastasis	Resection	Liver metastasis
11. Mir-Madjlessi, Farmer & Hawk (26) 1973	72, F	Obstruction	4	Invasion 4×3 cm	Resection, duodenojej- unostomy	Died; dehiscence anastomotic leak, peritonitis
12. Schulten, Oyasu & Beal (35) 1976	65, F	Obstruction	3	Focal in situ 7×3×1 cm	Resection- duodenojej- unostomy	Recovery-died 1 yr. carcinoma node neck-history rectal polyps
13. Spira & Wolff (39) 1977	59, M	Jaundice	2	Invasion 3.5 cm	Excision & Choledocojej- unostomy	Discharged 14 days.
14. Present report	57, F	Jaundice	2	Invasion 9×7 cm	Pancreato- duodenectomy	Recovery 5 mos.

malignant. This does not necessarily hold true in this series. Hemorrhage reported as massive was produced by small tumors, Macumber²² and Makkar.²³ Thus, size of the tumor may or may not have any bearing on malignancy or the possibility of hemorrhage.

CLINICAL FEATURES

The presenting clinical features of the malignant tumors were as follows: seven of the 14 presented with jaundice, five with obstructive symptoms, and two with anemia. Two of the jaundiced patients were also anemic.

Many of the non-malignant cases presented with gastric distress, epigastric pain, retrosternal pain and an anemia which was often discovered during workup. Others presented with outright hemorrhages. The most common clinical features were anemia (14 of 31=45%) and obstruction (12 of 31=38%). Only three had jaundice (3 of 31=10%). Many were found to have occult blood in the stools. Loose stools and diarrhea were infrequent complaints, although very common in villous tumors of the colon.

Thus, the most common presenting symptoms are related to partial bowel obstruction, gastrointestinal complaints, and jaundice. Anemia may be due to massive acute hemorrhage but this is not frequent. Usually the anemia is insidious in onset and found during the medical evaluation. Diarrhea has been noted in three of the 45 cases. An example of the various reasons for consulting a physician may be found in the case presented here. Epigastric distress and pain in the right upper quadrant with jaundice were the chief complaints.

Prolapse of a villous adenoma thru the pylorus may cause a partial obstruction or the growth may originate in the stomach and prolapse into the duodenum, as has been reported infrequently.

Abdominal examination is usually unrevealing as these tumors characteristically are soft and may even be difficult for the surgeon to palpate at operation, unless he does a Kocherization of the duodenum. If any hard mass is palpated, it may well be due to carcinomatous transformation.

TABLE II
NON-MALIGNANT VILLOUS ADENOMAS OF DUODENUM

No. Author	Age (yr) & Sex	Symptoms	Loc.	Size	Treatment and Remarks
1. Golden (11) 1928	41, M	Obstruction	1	8.5×5.5	Excision-well 2 mo. later
2. Hoffman & Grayzel (15) 1945	72, M	No G.I. symptoms	1	.4×.4	Autopsy-died renal tumor
3. Macumber, Stoll & Helwig (22) 1949	69, M	Hemorrhage, massive	1	1×1.1	2 Explorations-autopsy findings died 6 days post-op
4. Joyeux (20) 1950	37, F	Obstruction	1	2×2	Resection Billroth II
5. Piffaretti, Tatti, Molo & Legobbe (31) 1967	52, F	Anemia	2-3	6×4	Excision-recovered
6. Boyer & Helfrich (4) 1963	54, M	Pain, rt. posterior chest	1	9×4	Resection Billroth I
7. Greenwald, Schultz & Reed (12) 1962	50, F	Diarrhea, vomiting-no anemia	2	7×7	Excision & cholecystectomy-well 6 mos.
8. Malmel & Levin (24) 1965	25, F	Anemia-retrosternal	3	4×3.5	Excision, well 10 yrs.
9. Andersen, Iversen & Ostberg (1) 1965	64, F	Anemia	1	7.5	Resection Billroth II-well 5 yrs.
10. Makkar, Song & Cogbill (23) 1969	57, M	Hemorrhage	3	3×2	Excision, well 4 mos.
11. Serrano & McPeak (37) 1966	NA, M	Obstruction	2		Excision, well 5 yrs.
12. Serrano & McPeak (37) 1966	68, F	Obstruction & anemia	2-3		Excision, died 7 yrs. carcinoma breast
13. Miura (27) 1967	56, M	Obstruction	2		Excision
14. Johansen & Larsen (18) 1969	69, F	Anemia	1	5.4	Resection Billroth II
15. Hancock (14) 1970	NA	Obstruction	NA		Excision, well 8 yrs.
16. Palmisano & Guzzo (30) 1972	52, M	Asymptomatic-cardiac	3-4	3.5×8	Excision
17. Steinberg & Shieber (40) 1972	76, F	Inability to digest food	2		Excision-cardiac death 1½ yrs. later
18. Ring, Ferrucci, Eaton & Clements (32) 1972	56, F	Epigastric distress-no anemia	1	8×6	Excision-gastrojejunostomy-recovered
19. Ring, Ferrucci, Eaton & Clements (32) 1972	59, F	Jaundice & Anemia	3		N.A.
20. Ring, Ferrucci, Eaton & Clements (32) 1972	70, F	Jaundice	2-3		Excision
21. Saibil, Guttman & Palayew (33) 1972	66, F	Fullness in abdomen	2-3		Pancreatoduodenectomy
22. Nakazawa (29) 1972	35, M	Epigastric pain	2-3	4×2	Excision-no follow up
23. Nakazawa (29) 1972	48, F	Irreg. bowel habits	2-3	3.5×3	Excision-no follow up
24. Shah, Elibol & Aguilina (38) 1972	56, M	Obstruction, no anem.	1	3.3×2.7	Resection Billroth I
25. Mir-Madjlessi, Farmer & Hawk (26) 1973	46, M	Hemorrhage	1	3.5×2.5	Excision-recovered
26. Mir-Madjlessi, Farmer & Hawk (26) 1973	59, F	Jaundice	2-3	7×7	Pancreatoduodenectomy, well 5 yrs.
27. Jones & Clegg (19) 1973	71, F	Anemia	2	2.5×2.5	Excision-died 1 day post-op, blind loop duodenal
28. Kutin, Ranson, Gouge & Localio (21) 1975	52, F	Obstruction	1	4×4	Pancreatoduodenectomy, well 1 yr.
29. Kutin, Ranson, Gouge & Localio (21) 1975	69, F	Gastric distress	2	3×3	Excision-recovery
30. Fuller, Cruse, William & Sherman (10) 1976	53, M	Anemia, diarrhea, epigastric pain	1-2	10×10	Resection Billroth I, well 8 mos.
31. Haffejee, Angorn & Baker (13) 1976	18, F	Anemia	2	4.5	Excision

Therapy: Surgery is the only treatment that can be considered for these tumors in the duodenum. This is not only because of the tendency for malignant change, but the possibility of partial obstruction and bleeding. Continued growth, even without malignancy, may obstruct the ampulla of Vater. The type of surgery done will be decided after the abdomen is opened and exploration carried out. If the patient has jaundice, it is likely that a Whipple procedure will be necessary. Duodenotomy with

local excision may be all that is needed but it may be necessary to do a resection, such as a Billroth I or II, or a resection of the duodenum and proximal jejunum, thus having an end to end duodenojejunostomy. Frozen section studies or exploration for metastases may well be decisive.

Results: As indicated in Table I, five pancreatoduodenectomies (Whipples), five resections, and four excisions were performed for the malignant cases. All the Whipple procedures

did well postoperatively and there were no metastases reported, but those that had resections did not fare so well. Three of these later died of metastasis, one died postoperatively from a separation of the duodenojejunostomy anastomosis with leakage and peritonitis, and the fifth (Billroth II) is alive 16 years postoperatively.² Two of the patients who had local excisions have done well but one died five days postoperatively. All three patients who had pancreatoduodenectomies for non-malignant lesions have done well.

The use of endoscopy for biopsy may be of some benefit, but this may be a mixed blessing since a benign-tissue pathology report may be accurate for the greater portion of the tumor while there may be some portion that will be malignant. Even at surgery, a complete examination of the tumor is necessary as demonstrated in the article published by Spira & Wolff³⁹ in 1977.

Is there a connection between polyposis of the colorectal area and villous tumors of the duodenum? Our case had required a total colectomy for multiple polyposis twenty-five years previously (Fig III) and still had polyps removed periodically from the remaining rectum. She had several adenomatous polyps present in the duodenum, as well as the large villous tumor. Dr Schulten *et al*³⁵ report that adenomatous polyps were removed from a patient through a proctoscope 31, 20, and 12 years before they did a pancreatoduodenectomy for a villous tumor in the third part of the duodenum.

SUMMARY

A case of a villous tumor of the duodenum with invasive adenocarcinoma at the ampulla of Vater is presented and added to 44 previously reported cases of duodenal villous tumors.

This lesion has been found in patients between the age of 18 and 76 years and in females predominately (60%).

Twenty-two (50%) of the tumors were located in part two of the duodenum, many of which extended into part three. Another thirteen (30%) were in the proximal duodenum. Perhaps the irritative effects of gastric and biliary secretions are initiating factors in the formation and/or malignant change of this lesion. Indeed, this lesion is rare in the fourth part of the duodenum, as well as in the jejunum and ileum, despite the fact that this portion of the small bowel is many times the length of the duodenum.

Jaundice is the most common clinical feature seen in patients with malignant villous tumors. Bowel obstruction and anemia are the predominate clinical features of benign villous tumors of the duodenum, while only 10% developed jaundice.

It is noted that the age of occurrence, sex distribution, and percentage of malignancies of duodenal villous tumors closely correspond to villous tumors of the stomach, jejunum, ileum and colon.⁴²

Predictability of hemorrhage or malignancy cannot be based on the size of these lesions. One of the smallest tumors produced the most severe hemorrhage and the largest was benign.

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Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

Warning

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. (See Box Warning.) Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids).

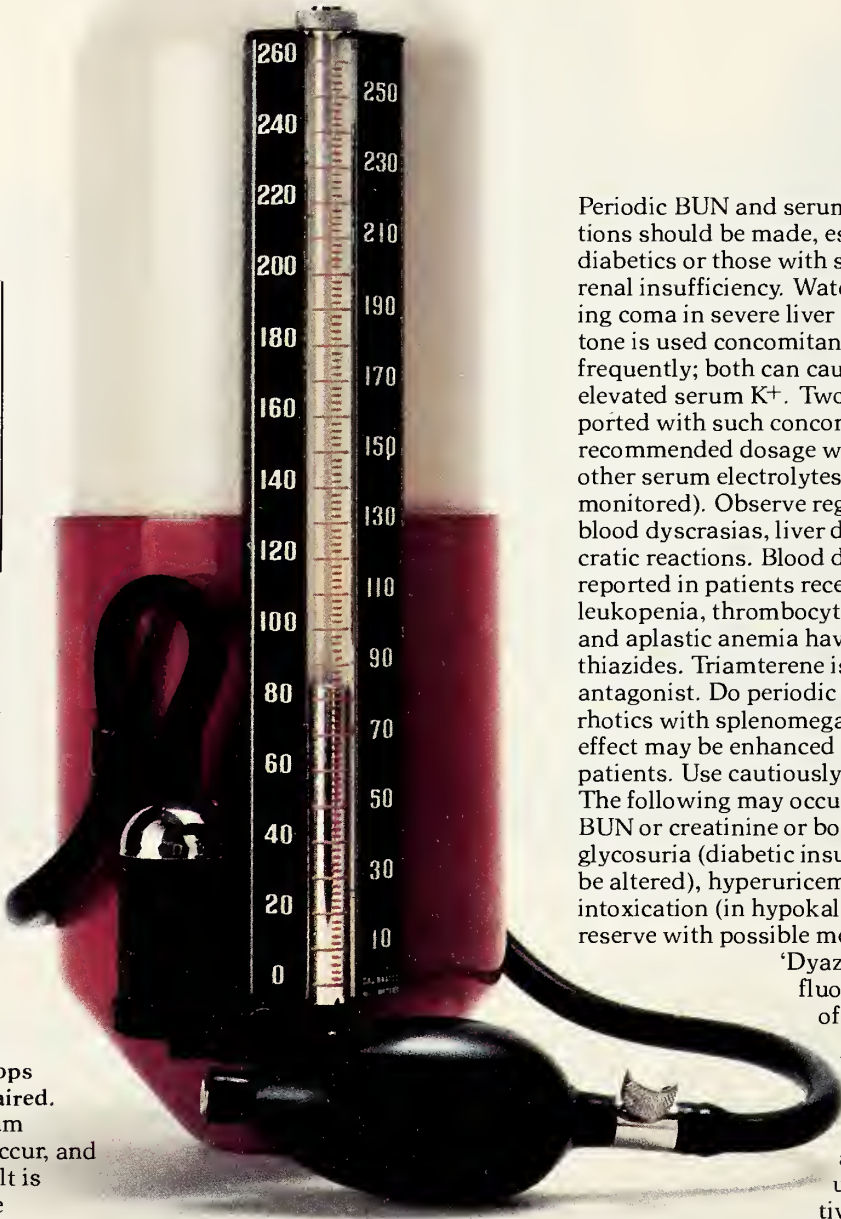
Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis.

'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions;

nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

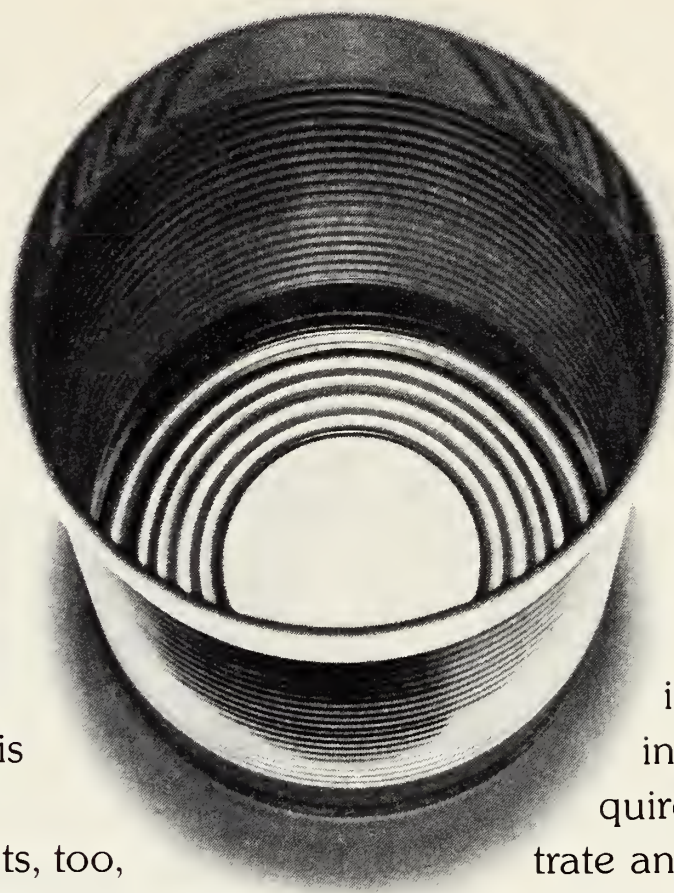


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Usage in ambulatory patients. Caution patients that these products may impair mental and/or physical abilities required for performance of potentially hazardous tasks such as driving a car or operating machinery.

Interaction with other CNS depressants. Patients receiving other narcotic analgesics, general anesthetics, phenothiazines, tranquilizers, sedative-hypnotics, or other CNS depressants (including alcohol) may exhibit additive CNS depression; when used together reduce dose of one or both.

Usage in Pregnancy. Safe use is not established. Should not be used in pregnant patients unless potential benefits outweigh possible hazards.

PRECAUTIONS: Head injury and increased intracranial pressure. Respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

Acute abdominal condition. These products or other narcotics may obscure the diagnosis or clinical course of acute abdominal conditions.

Special risk patients. Administer with caution to certain patients such as elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, or prostatic hypertrophy or urethral stricture.

ADVERSE REACTIONS: Most frequently include lightheadedness, dizziness, sedation, nausea, and vomiting; more prominent in ambulatory than in nonambulatory patients; some may be alleviated if patient lies down; others include: euphoria, dysphoria, constipation and pruritus.

DRUG INTERACTIONS: CNS depressant effect may be additive with that of other CNS depressants. See Warnings.

For symptoms and treatment of overdosage and full prescribing information, see package insert.

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Wastewater Reuse

Water is one of the most essential elements for sustaining life; and the one most often taken for granted. The average person gives little thought to the story behind the clean water that flows from the faucet to meet his daily needs. There is no such thing as new water. The water we drink is probably taken from a supply fed by streams that receive our treated sewage. Or with a river water supply, waste-water dumped upstream becomes the downstreamers' water supply.

In Oklahoma, the State Health Department has statutory responsibility for protecting the public water supplies, inspecting treatment plants to see that effluent standards are being met, and maintaining water quality in the streams. In carrying out this responsibility, the health department has established numerous monitoring stations in its streams and annually publishes a report on the status of these streams. It also administers a construction grants program to assist communities in building and improving sewage treatment plants, and it issues discharge permits to control what is fed into the stream system.

Every sewage system in the state goes through secondary treatment before it is dis-



News From The Oklahoma State Department of Health

charged into a stream. These secondary treatment standards are acceptable to public health requirements.

However, the State's streams and lakes still may be polluted by the high nutrient content of wastewater. The phosphorus and nitrogen in waste-water may cause rapid growth of algae which consumes considerable amounts of oxygen in the water. A stream with too little oxygen will not support life and eventually becomes clogged and overgrown with algae.

As a means of keeping the nutrients out of the streams, the Health Department encourages the use of wastewater for crop irrigation. The same nutrients which can pollute the streams are extremely beneficial to crops.

In order to maintain and preserve the quality of the water in Oklahoma, we must consider every means including wastewater reuse to achieve the pure water environment we have inherited. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR AUGUST, 1977

DISEASE	August 1977	August 1976	July 1977	Total To Date	
				1977	1976
Amebiasis	—	—	5	14	8
Brucellosis	1	—	1	3	7
Chickenpox	3	9	10	915	1565
Encephalitis, Infectious	1	2	2	11	14
Gonorrhea (Use Form ODH-228)	1222	1259	1074	8515	8755
Hepatitis, A, B, Unspecified	47	57	47	495	962
Leptospirosis	—	—	—	—	1
Malaria	—	1	—	—	2
Meningococcal Infections	—	1	—	10	19
Meningitis, Aseptic	7	7	5	29	18
Mumps	13	20	13	472	668
Rabies in Animals	8	11	20	185	101
Rheumatic Fever	—	1	—	2	11
Rocky Mountain Spotted Fever	9	15	8	64	80
Rubella	—	6	2	29	60
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	1	2	2	55	288
Salmonellosis	34	29	29	161	165
Shigellosis	6	10	7	30	152
Syphilis, Infectious (Use Form ODH-228)	7	7	8	57	77
Tetanus	—	—	—	—	—
Tuberculosis, New Active	20	29	20	211	236
Tularemia	1	—	3	8	7
Typhoid Fever	—	1	—	1	1
Whooping Cough	2	8	—	5	18

OKLAHOMA STATE MEDICAL ASSOCIATION

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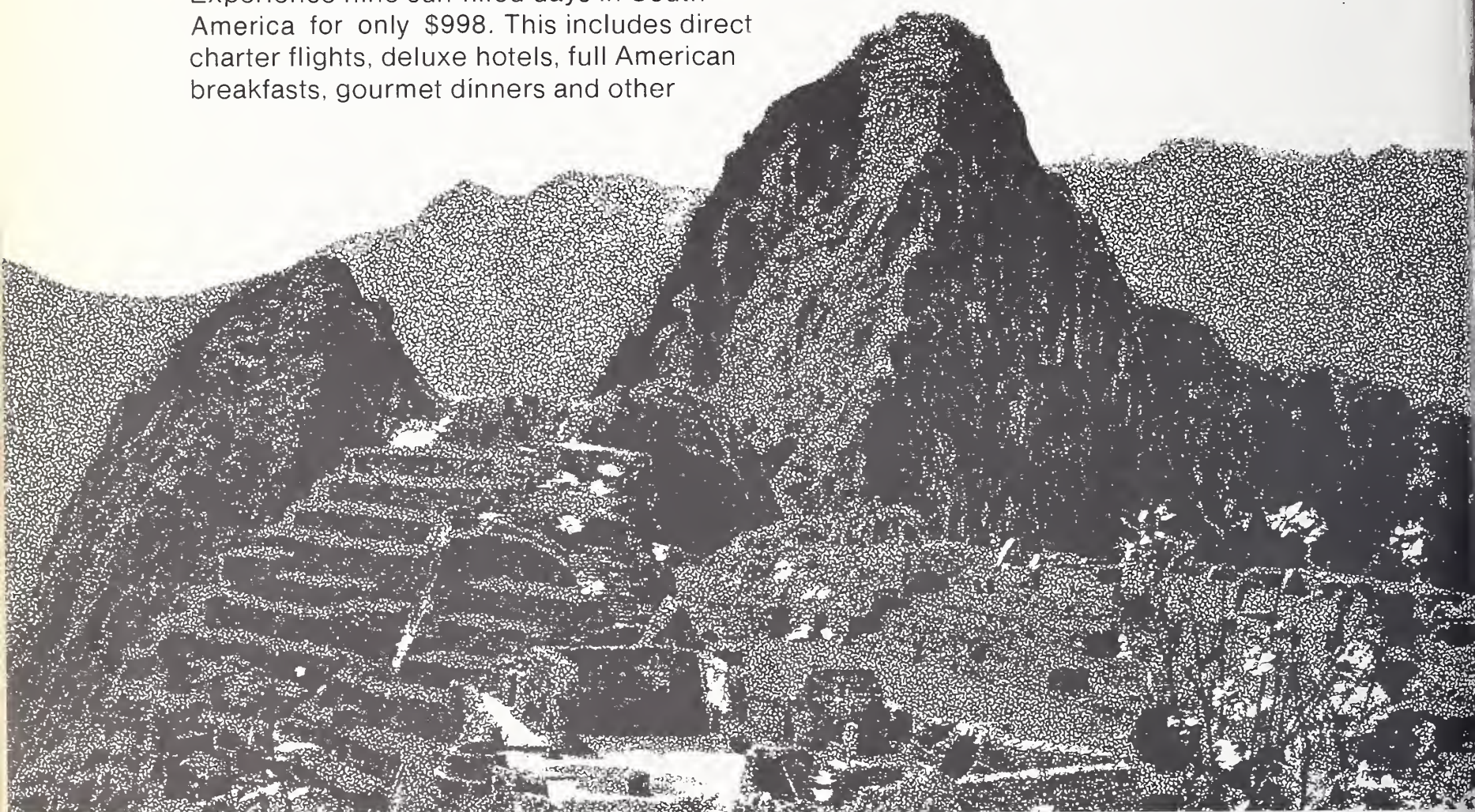
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SPECIAL SECTION:
BRITISH HEALTH SERVICE
NATIONAL HEALTH INSURANCE

National health insurance, an idea whose time has come and gone and apparently come again, is being promoted by federal officials with surprising, if not alarming, intent. HEW Secretary Joseph Califano, recently kicked off a series of federally-sponsored seminars on national health insurance to determine what type of NHI plan we should have, not if we should have one at all. At the same time the Congress of County Medical Societies and the Private Practice Foundation have begun another series of NHI hearings featuring physicians, elected officials, and others who have particular interest or expertise in the field of national health insurance.

Meanwhile the Oklahoma State Medical Association has embarked upon a unique program which will give approximately 150 physicians and spouses a first-hand view of national health insurance in operation . . . the British Health Service. In mid-November, an OSMA-sponsored tour of the British Health Service will leave Oklahoma City for a one-week, intensive study of national health insurance British style.

The Journal is pleased to present the follow-

ing special section on national health insurance for your review. The first paper details 30 years of NHI in Great Britain and was written by Pamela M. McCurdy, MD, a practicing physician in Norman, and David K. McCurdy, JD, formerly of the Attorney General's staff and presently studying international economics on a graduate fellowship from the International Rotary Foundation at the University of Edinburgh, Scotland. The second paper is the position paper of the Oklahoma State Medical Association which was presented to the HEW NHI hearing in Tulsa on October 6. The paper was presented by OSMA Executive Director, David Bickham. The third paper is the position paper prepared by George Kamp, MD, President-elect of the Tulsa County Medical Society. Dr Kamp was a panelist at the NHI hearing in Tulsa, and therefore his paper was presented by John H. Smith, Jr., MD, a member of the Board of Directors of the Tulsa County Medical Society.

The last item in this section is the tentative program for the OSMA-sponsored tour of the British Health Service. For a detailed report on this unique program, see future issues of *The Journal*.

The British Experience: Thirty Years of National Health Service

PAMELA M. McCURDY, MD
DAVID K. McCURDY, JD

INTRODUCTION

The United States is the only great industrialized nation without some form of national health insurance. Currently the federal government is considering numerous proposals and alternatives to a national health insurance program. In exploring the existing health systems in the industrialized world, the National Health Service in Great Britain is consistently used as an example. Perhaps due to our historical affiliation, Great Britain's experience with the National Health Service is of vital signif-

"The National Health Service, when established in 1948 over the determined opposition of numerous British doctors, was regarded as the triumph of a social ideal."

icance in the debate over a national health insurance program in America.

This report provides the reader with a general overview of the National Health Service in Great Britain. A full analysis and appreciation of the system is not possible without a knowledge of the social, political and economic condi-

tions of Great Britain which provided the impetus for developing a National Health Service. Furthermore, a breakdown of the administrative structure is essential to allow the observer to understand the workings of the system and to recognize the esoteric language of the British health service. The report includes a cursory examination of the conditions of general practice, hospital practice and specialization within the National Health Service. It also contains a section on general economic and financial data regarding the cost of providing medical care in the United Kingdom. The last section on current issues facing the National Service summarizes much of the debate surrounding the National Health Service as it compares to the medical profession and health care delivery in the United States. The authors have deliberately tried to avoid injecting their personal bias or views into the report and hope that the reader accepts the authors' goal of objectivity.

HISTORY AND DEVELOPMENT OF THE NATIONAL HEALTH SERVICE

The National Health Service was formally established pursuant to the National Health Service Act of 1946 and went into effect on July 5, 1948. Even though the service was officially created in 1948, a health service of sorts had existed for many years in Great Britain. The new system was a consolidation or reorganization of much of the pre-war health care system in England.

The post-war National Health Service Act was designed to place upon the Minister of Health, Aneurin Bevan, the responsibility of establishing a comprehensive medical service to "secure improvement in the physical and mental health of the people of England and Wales and the prevention, diagnosis and treatment of illness."¹ The act provided that the British citizen could receive, regardless of ability to pay:

- (1) Care by the general medical practitioners and specialists and by dentists and oculists.
- (2) Complete inpatient and outpatient hospital care, with treatment continuing during convalescence and rehabilitation.
- (3) Home nursing and domestic help when required by illness of the homemaker.
- (4) All necessary drugs and appliances.²

The National Health Service, when established in 1948 over the determined opposition of numerous British doctors, was regarded by many as a triumph of a social ideal. Dr Max Gammon, a London physician, stated to a United States Congressional Subcommittee that the theoretical basis of the National Health Service rested upon one or both of two basic assumptions:

- (1) That centralized planning is superior to individual decision in the managing of personal resources and requirements and, or alternatively, (2) that the state is capable of creating resources in excess of the aggregate generated by individuals.³

With this theoretical basis, the British government set out to provide free medical and dental care for its people.

In studying the history and development of the National Health Service, it is important to consider one of the primary catalysts for nationalization: The rift between the general practitioner, the hospital staffed by specialists and consultants, and the local health authorities. The College of Physicians was founded early in the 16th century and had a monopoly on the licensing of doctors in London. The United Company of Barber-Surgeons was also established in the 16th century and existed until the separation of the surgeons into the Royal College of Surgeons in 1800.⁴ The two colleges came to represent the elite of the medical profession. The lower echelon of the

medical profession was represented by the Society of Apothecaries which were the primary providers of medical care to the ordinary citizen.⁵ Throughout the 19th century there was a continuous growth of the hospital system and the gradual development of specializations. With this growth came a deepening division between the general practitioner and the hospital doctor. This division in the interests of the specialists and the general practitioners has been a continuing feature of the British health care experience and has contributed to the development of the National Health Service.

"Although the medical profession offered token resistance, many of the physicians and health care providers acquiesced in the establishment of the National Health Service."

Another significant factor in the development of the National Health Service was the role of the government in the provision for the poor under the Elizabethan Poor Law.⁶ The administration and operation of the Poor Law rested on the local government. The local Poor Law Board became involved in the provision for the sick and established many infirmaries, dispensaries and hospitals. The Poor Law institutions and charitable societies comprised the basic provider of health care to the poor and common citizen in the United Kingdom until World War II. Along with the Public Health Act of 1875 and the National Health Insurance Act of 1911, it became apparent that the state was committed to the provision of preventive medicine.⁷

Nationalization of the health care delivery system was a simple and natural step in Great Britain following World War II due to the economic and social conditions of the country. Although the medical profession offered token resistance, many of the physicians and health care providers acquiesced in the establishment of the national health service.

THE ADMINISTRATIVE STRUCTURE OF THE NATIONAL HEALTH SERVICE

Prior to the 1974 reorganization, the National Health Service had a tripartite administrative structure composed of the three pre-national health service medical establishments: hospital and special services, primary

care services, and community services.⁸ The three services were kept separate and distinct primarily because of the politics of nationalization and the interest groups represented. The overall system was under the direction of the Department of Health and Social Security (DHSS).

The hospital and specialist services were controlled by 15 regional hospital boards.⁹ The only exception to this control was the management of the teaching hospitals, one per region, which were governed by boards directly responsible to the Secretary of State. The primary care services (general medical, dental, optical and pharmaceutical) were separately administered by 134 executive councils.¹⁰ The councils were subject to control by the Secretary of State, but their independence was constrained by acts of Parliament. The community services were performed by 175 local health authorities each reporting to the corresponding local government authority.¹¹

"... it has been criticized as creating a sterile, uncaring bureaucracy."

The reorganization of the British Health Service became effective April 1, 1974.¹² The plan called for an integration of the three different branches of the National Health Service (hospitals, general medical services and local health services).¹³ The objective of the reorganization was to end the fragmentation of authority and stress managerial efficiency.

In the present administrative structure of the NHS there are 14 regional health authorities (RHA) directly responsible to the Secretary of State.¹⁴ The primary function of the RHA is to coordinate the plans in the area health authorities and to ensure a balanced development within the regions. The RHA also have responsibility for at least one university medical school within its region.

There are 90 smaller area health authorities (AHA), 16 of which are in London, which generally correspond geographically with the new local government boundaries.¹⁵ The AHA are planned to serve districts of 200,000 to 500,000 people and manage the day-to-day operation of the National Health Service.¹⁶ The AHA employ staff, assess area needs and administer health facilities in their areas. Each AHA has

a committee of 20 persons, the chairman appointed by the Secretary of State; four members are from local authorities and the remainder is composed of members from the medical profession and other interested groups.¹⁷ Each AHA is divided into between one and six districts, these being the smallest administrative units of the National Health Service.¹⁸ Each district is managed by a committee of six composed of a district administrator, a district finance officer, a district nursing officer, a district community physician and two elected representatives of the medical profession, one consultant and one general practitioner.¹⁹

The 1974 reorganization of the National Health Service was designed to provide greater managerial control and efficiency, however, it has been criticized as creating a sterile, uncaring bureaucracy.

GENERAL PRACTICE IN THE NATIONAL HEALTH SERVICE

Medical education in Great Britain has remained relatively unchanged since pre-NHS. The system remains hospital oriented with the hospitals selecting the top graduates for further training while the remainder go into general practice.²⁰ There are currently efforts within the National Health Service to upgrade the training and career status of the general practitioner. Mr. Ansen Owen, Administrator for the High Wycombe Health District, Buckinghamshire, England, aptly summarized the trend when he stated in his address to the National Leadership Conference sponsored by the American Medical Association in Chicago in January, 1977:

The hospital during this period was the embodiment of all that was best in medical care and one's own teaching hospital was naturally the center of the medical universe. General practice was the place for the rugged individualist who tackled everything from advanced midwifery to various forms of surgery and whose personalities were at least as powerful as their potions. Things, however, are changing again. There is a renaissance in general practice and I ought to remind you here that the great bulk of illness is in fact treated by general practitioners and that Britain remains as firmly committed to them as doctors of first contact as it was when the National Health Service was inaugurated.²¹

The general practitioner contracts with the family practitioner committees to provide a

family doctor service for all patients registered. The average general practitioner has around 2,500 patients on his list.²² House calls by the general practitioner are common and he must visit his patient if requested or pursuant to his contract must see that another doctor does. A doctor is responsible for providing his own premises, equipment and office help or staff.²³ There is currently a trend in Great Britain for doctors to be based at health centers provided by the local government, which is seen by many as a threat to independent practice and a move toward salaried service.

"The average general practitioner has around 2,500 patients on his list."

A general practitioner is not an employee of the state, but is an independent contractor negotiating to provide a service, with payment being rather complicated. The general practitioner receives a basic allowance for providing his service, and is paid a capitation fee for every patient listed as being registered with him.²⁴ The general practitioner is reimbursed for the rent of his office plus two-thirds of a standard salary for two staff members, either secretaries or nurses.²⁵ Additional fees are paid for patients over 65 years of age, together with a number of fixed sums for certain items of service,²⁶ as well as hospital work. The average annual net income for a general practitioner in Great Britain has been estimated to be from \$13,700 to \$14,500.²⁷ (See Table I) A general practitioner in the National Health Service has considerable freedom to accept or reject any patient on his patient list. There is virtually no control over performance and malpractice litigation is almost nonexistent.²⁸

The general practitioner in most cases is the initial point of entry for a patient into the National Health Service. He may either treat the patient or refer him to the hospital service, ophthalmic service or pharmaceutical service.²⁹ Generally, the general practitioner treats 96 percent of all episodes of illness from start to finish.³⁰ Because of his primary role in the delivery of health care, the quality of medical treatment is dependent upon the quality of

TABLE I
A conjectural construction of the sources
of annual income of a possible general
practitioner in April, 1974.⁹⁵

Basic practice allowance	\$ 3,612
Allowance for practice in a designated area, Type 1	893
For seniority (15 years practice)	447
(20 years practice)	894
(25 years practice)	1100
Allowance for group practice	464
For vocational training	428
Capitation fees	
a) for 700 elderly patients	2,769
b) for 2200 other patients	5,504
Payment for out-of-hours responsibilities	
I) Practice allowance	688
II) Additional capitation fees	1,032
III) 70 night visits @ \$5.16	361
Average of miscellaneous other payments to general practitioners from Executive Councils	602
Payments for work in hospital service (one afternoon per week)	943
Total Gross Receipts	17,744
Estimated non-reimbursable expenses .	4,059
Net income before tax	\$13,685*

*1972 Average annual income for physicians in United States, \$40,500.⁹⁶

the general practitioner. The National Health Service has no control over quality of care other than to hear complaints of over-prescribing or unprofessional conduct.³¹ However, by 1978 the National Health Service hopes to encourage all newly appointed general practitioners to undertake a three-year period of training consisting of two six-month periods of general practice and four six-month periods of relevant specialties in hospitals.³²

Waiting lists or queues, the scourge of the hospital service, are virtually nonexistent for the general practitioner.³³ There are, however, waiting lists for geriatric cases in some areas.³⁴

HOSPITAL AND SPECIALTY PRACTICE

The general practitioner refers patients to specialists or consultants based in hospitals. The hospital service provides the full range of specialist care for inpatients and outpatients. A patient may be referred by his general practitioner to any hospital in the country. He is referred to a consultant's service but may not receive personal attention by that consultant.³⁵ The patient must accept the fact that he may be treated by an assistant. Upon referral by the

general practitioner, the patient is reviewed by the inpatient or outpatient clinic to determine the relative urgency of treatment and necessity for admission.³⁶ Once admitted, the consultant assumes the care of that patient while in the hospital and refers the patient back to his general practitioner when released.

The patient makes no contribution to the cost of his treatment, and priority is given only to the surgical need of the patient. However, it is reported that the hospital service is oriented to catering toward the acute cases and thus geriatric, chronic and handicapped cases are neglected.³⁷

"The average annual net income for a general practitioner in Great Britain has been estimated to be from \$13,700 to \$14,500."

Senior medical staff in the hospital have contracts with the regional health authorities.³⁸ The senior medical staff is composed of consultants, senior hospital medical officers, medical assistants and senior registrars. Junior hospital doctors are employed by the area health authorities.³⁹ Hospital doctors may contract to work either full- or part-time. However, only consultants or part-time contracts are permitted to undertake private practice. All consultants (senior grade medical officers) are paid the same rate regardless of speciality, workload or responsibility, although there are increments for seniority.⁴⁰ Consultants may also receive distinction awards. A full-time consultant is paid an average of \$18,400 per year for an 11-session week, which is the equivalent to a 40-hour work week.⁴¹ A part-time consultant contracts for nine sessions per week and is paid 9/11ths of the above sum.⁴²

Private or pay beds make up less than two percent of the available hospital beds in Great Britain.⁴³ There currently appears to be a move by the government to eliminate the part-time contract and private practice component of the consultant's work. Furthermore, Barbara Castle, the Social Services Director, has expressed her intention to phase out private beds in the National Health Service.⁴⁴

Junior hospital doctors are employed by area health authorities and are responsible to con-

sultants. In theory, the junior doctors are in training, but in practice the junior is often merely used as a "pair of hands" and training is incidental.⁴⁵ The pay for a house officer is less than \$5,000 per year.⁴⁶

One of the positive aspects of the National Health Service has been the redistribution of specialty staff in many peripheral hospitals outside the main teaching centers.⁴⁷ On the other hand, many consultants believe that there has been a loss of mobility within the profession. A consultant must apply for an advertised post which happens to fall vacant as he finishes his training.⁴⁸ Once a consultant has an appointment, it is difficult for him to move, as he cannot simply choose where he wishes to practice.

The Royal College of Surgeons has stated that the morale within the National Health Service and more specifically, within the hospital service, is dangerously low. The report states:

The service has lost its sense of purpose and its sense of unity and the good-will that used to exist between all groups working within it has been replaced by strife.⁴⁹

The hospital service is faced with increasing problems due to financial stringency, over-centralized control and reorganization. Morale in the peripheral hospitals is further aggravated by financial problems, increasing workload and staff shortages.

ECONOMICS AND FINANCING OF THE NATIONAL HEALTH SERVICE

David Ennals, Britain's Secretary of State for Social Services and a member of Parliament, recently stated:

We see health care as the right of every citizen, just as we and the Americans see education as a right. So we provide all health care free to the whole population, except for some small charges.⁵⁰

Mr. Ennals further stated that the cost of the National Health Service was less than six percent of Britain's gross national product and in his opinion this was not out of control.⁵¹

In the National Health Service, the health and welfare services are financed both from central and local government sources. The consolidated fund constitutes the bulk of the cen-

TABLE II-A

Health and Welfare Services
England and Wales Sources of Finance.⁹⁷

Part I	Central Government	1973/74
	Consolidated Fund	87.7%
	National Health Service	
	Contributions	8.1
	Charges to Recipients	3.5
	Miscellaneous	0.7
	Total — Central Government	100.0%
Part II	Local Health and Welfare Services	
	Rates & Consolidated Fund	
	Grants	91.0%
	Charges to Recipients	9.0
	Total	100.0%

TABLE II-B

Personal Health Care Spending by
Source of Funds in the United States in 1975⁹⁸

Sources	1975
Public Funds:	
Federal	28%
State & Local	12
Private Health Insurance	35
Direct Payment (Patient)	25
Total	100%

tral government financing and contributes about 85 percent of the total.⁵² (See Table II)

The operation costs of hospitals in 1973/74 claimed about 60 percent of the funds,⁵³ mainly attributable to staff salaries and wages. (See Table III) The National Health Service spends \$77,400,000,000 a year and employs almost a million people.⁵⁴ Capital expenditure on hospitals has increased substantially since 1960 and is currently around 8 percent of the total expenditure.⁵⁵ One of the primary criticisms of the National Health Service is that for the first 15 years of its operation, not one new hospital was completed and more was spent on capital improvement before World War II than after.⁵⁶

Of the executive council services, expenditures on pharmaceuticals continue to be the largest single item.⁵⁷ This item claimed as much as 12 percent of the total central government's expenditure in the mid-1960's, but has had some decline following strenuous efforts by the government to curb pharmaceutical costs.⁵⁸ Since the establishment of the National Health Service expenditures on health and welfare services have increased dramatically. In 1949/50, the central and local government expenditure for England and

Wales was \$753,360,000.⁵⁹ It increased to \$2,992,800,000 and \$5,146,240,000 for England alone in 1971/72 and 1973/74, respectively.⁶⁰ When the National Health Service was introduced in 1948, it was generally thought that once the backlog of untreated illness had been dealt with, the cost of the health service would actually fall. This did not occur for three basic reasons:

(a) An underestimation of the basic health care needs,

(b) A failure to recognize that need is relative and,

(c) A failure to allow for effects of inflation.⁶¹

The government is recognizing that there is no limit to the public's expectation of health care.⁶² In more economic terms, the demand is artificially increased, but the supply is artificially diminished. To combat this unlimited demand, some form of rationing is introduced. In the National Health Service there are three main rationing points: The general practitioner referral, the consultant's decision, and queue. This rationing is seen in the form of delays, waiting lists, perfunctory consultations and the lack of choice of the doctor.⁶³

TABLE III-A

Health and Welfare Services
England and Wales
Percentage Cost of Services.⁹⁹

Services	1973/74
Central Administration	0.9%
Hospitals:	
Current (60% staff salary)	61.8
Capital	9.1
Executive Council Administration	0.7
General Medical	7.9
Pharmaceutical	10.4
General Dental	5.2
Ophthalmic	1.2
Welfare Foods	0.5
Other Central Government Services	2.3
Total Cost of Central Government Services	100.0%

TABLE III-B

Total Expenditures for
Personal Health care
in the United States in 1975¹⁰⁰

Services	1975
Hospital Care	45.2%
Physician Services	21.4
Prescriptions and Drugs	10.3
Dental Services	7.3
All Other	15.8
Total	100.0%

In the area of pharmaceuticals, the minimal charges imposed have been ineffective as a ration. An example of this artificial supply and demand is given by J. McLuskie, MD, a member of the district management team in the High Wycombe District, when he stated to the National Leadership Conference sponsored by the American Medical Association in Chicago in January, 1977:

In my country the general medical services cost \$4,128,000 and the chemist's drugs cost \$5,831,000. There is surely something wrong here.⁶⁴

The Treasury of Great Britain determines annually the budgetary level of the Department of Health and Social Security.⁶⁵ Once allocated, the DHSS monitors both current and capital expenditure in the National Health Service.⁶⁶ The projected needs of each area are formulated at the area health authority, consolidated at the regional health authority and submitted to the DHSS. One of the main objectives of the National Health Service centralized financial control is to achieve equity between regions. Success in this area has been mixed, with more equity developed in current expenditure than in capital improvement. It is argued that since the area budgets are merely inflated each year, there is an incentive for area authorities to spend up to the limit, thus resulting in waste, inefficiency and regional disparities.⁶⁷

ISSUES FACING THE NATIONAL HEALTH SERVICE

The issues making up the debate on the relative success of the British National Health Service are numerous and often difficult to delineate, however, below is a general review of some of those issues.

On the positive side or to the credit of the NHS:

- Citizens within the United Kingdom have access to medical care and treatment regardless of their ability to pay.⁶⁸
- There is a substantial increase in specialist staff in many of the peripheral hospitals outside the main teaching areas and greater equity in the distribution of facilities and quality of care.⁶⁹
- Centralized planning is alleged to be superior to individual decision making and results in elimination of duplicated services.⁷⁰

- The public is provided greater protection in the case of catastrophic and long term illness.⁷¹
- The general practitioner is the entry point into the NHS and he treats 96 percent of the episodes of illness from the start to finish.⁷²
- There are no waiting lists for acute illnesses and emergencies with the general practitioner.⁷³
- All speciality consultation is done by referral from the general practitioner, therefore resulting in a check and balance on the specialist and making him more responsive to the general practitioner and patient.⁷⁴
- The cost of providing medical care through the NHS in Great Britain is less than 6 percent of the gross national product as compared to roughly 7.5 percent in the United States.⁷⁵
- The vast majority of the general public in Great Britain has consistently expressed its satisfaction with the National Health Service.⁷⁶
- The family practitioner is the backbone of the British medical system as compared to the United States which has 80 percent of the care provided by specialists.⁷⁷
- Physicians can buy full malpractice insurance against legal costs and damages, whatever their specialty, for a standard payment of about \$70 a year.⁷⁸
- Medical malpractice litigation is not a significant problem since contingency fees are not allowed; juries do not decide damages and the British are historically not as litigious as Americans.⁷⁹

On the negative side or to the detriment of the NHS:

- The NHS is faced with an increasing bureaucracy.⁸⁰
- There is a trend in the NHS toward mediocrity due to lack of incentives.⁸¹

"Private or pay beds make up less than two percent of the available hospital beds in Great Britain."

- There is an inadequate capital investment in hospitals and medical facilities in the United Kingdom.⁸²
- The loss of mobility for the physician has

contributed to the deterioration of the status and independence of the physician.⁸³

- The morale of the physicians and staff in the NHS, especially in the hospital service is dangerously low.⁸⁴
- There is a trend toward greater governmental intervention and control within the medical profession.⁸⁵
- There is an apparent move toward a salaried medical profession.⁸⁶
- There is a lack of consumer choice in the specialty area of consultation.⁸⁷

"... the moral within the National Health Service, and more specifically within the hospital service, is dangerously low."

- There is a non-economic use of resources resulting in waste and inefficiency, ie excessive use of diagnostic testing.⁸⁸
- There is no direct financial responsibility upon the individual patient for the acute, less severe and short term illnesses which contributes to the unlimited demand for services.⁸⁹
- There are long waiting lists or queues, some in excess of a year for elective or non-urgent surgery and treatment.⁹⁰
- The annual migration of doctors from Great Britain is nearly 12 percent or three to four hundred of the medical graduates.⁹¹
- Roughly 60 percent of the junior hospital staff and nearly 20 percent of the senior hospital staff are foreign trained doctors.⁹²
- The unlimited access to medical care, especially in the area of pharmaceuticals, is inefficient.⁹³
- Physicians in Great Britain have limited career and economic benefits.⁹⁴

CONCLUSION

The National Health Service in Great Britain was inaugurated in 1948 with the stated purpose of providing quality medical service at no cost to the citizens of the United Kingdom. The National Health Service inherited a system and standard of medical care, and in effect only instituted a new method of financing

based upon taxation. The three principal entities of the pre-NHS medical system, ie the general practitioner, the hospital and specialty service, and the local health authority, remained intact throughout the evolution of the National Health Service. Fundamental to the evolution of the National Health Service and system of medical care in Great Britain is the rigid distinction and division between the general practitioner and the hospital consultant or specialist. The structure of the National Health Service remained virtually unchanged until the reorganization of 1974, which was designed to instill greater managerial efficiency and centralized control.

There are numerous issues facing the National Health Service in Great Britain today. While the vast majority of British citizenry express satisfaction with the system, critics abound. Regardless of the arguments and contentions set forth by both proponents and opponents of the National Health Service, it should be readily apparent to Americans that the National Health Service evolved according to the peculiar political, social and economic conditions of Great Britain. Accordingly, the experience of the National Health Service in Great Britain is relevant to American inquiry. However, it would be extremely impractical for the United States to model any system of national health insurance after the British National Health Service. □

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National Health Insurance And Oklahoma

Presented by David Bickham,
Executive Director,
Oklahoma State Medical Association

Editor's Note:

The following is the statement presented by OSMA Executive Director David Bickham to the October 6, 1977, HEW public forum on national health insurance. The forum was held in Tulsa before approximately 150-200 persons . . . most of whom were HEW employees, health planners, or persons otherwise especially interested in national health insurance. In all, approximately one dozen persons presented prepared texts on national health insurance; most of these were texts presented by persons or organizations who had something to gain from a mandated program of universal health care coverage.

The OSMA paper ties national health insurance directly to the needs of Oklahoma citizens and points out that Oklahoma is a unique state and that national solutions do not necessarily solve Oklahoma programs. The OSMA paper also points out the ways in which Oklahomans, especially the Oklahoma State Medical Association, have made giant strides in solving our problems without the help and/or interference of the federal government.

Although the official text was entered into the record, Mr. Bickham was not given the opportunity to complete his testimony and was forced to present the last half of the paper extemporaneously due to time. The Journal feels that the paper includes some important points that all

physicians should be aware of, and therefore includes it in this special section on national health insurance.

Mr. Chairman, Members of the Panel and Guests, I am David Bickham, Executive Director of the Oklahoma State Medical Association. As such, I represent over 2,700 medical doctors who are voluntary members of our organization. I am here to present the views of the Oklahoma State Medical Association on National Health Insurance . . . an issue which has consumed the thoughts and efforts of many persons, both inside and outside the medical profession. To say that the subject is controversial with much depending upon the outcome of the debate is indeed an understatement.

Oklahomans have long been proud of their individualistic nature, and we are champions of the concept of self-determination. It was the hard work of individuals which carved this state from rolling prairies in less than a hundred years. Oklahomans are proud of their heritage, and we are proud of our state.

The Oklahoma State Medical Association is made up of doctors who share these same ideals — individualism, hard work and self-determination. We are older than the state, having originated in Indian Territorial days. Oklahoma doctors have taken good care of their patients and over the years the two have de-

veloped a common bond. Today Oklahomans are among the healthiest people in the nation, and our commonness in goals and objectives is evidenced by our low incidence of professional liability claims (we have the lowest malpractice insurance rates in the nation) and in many other ways. Oklahomans have always believed strongly in self-determination, and we have always been supporters of constructive conservatism.

"Oklahoma doctors have taken good care of their patients over the years, and the two have developed a common bond."

I believe this is one of the principal reasons Oklahomans have always been opposed to federalized health care and national health insurance.

The concept of NHI is by no means new to any of us, although with a new and more liberal administration, this is perhaps the first time national health insurance has received so much attention and the first time it has been promoted by so many federal tax dollars. Prior to the first of these HEW hearings on national health insurance which was just two days ago in Washington, DC, Secretary Joseph Califano explained that both he and the President were dedicated to seeing national health insurance passed by 1981. The Secretary also said that the purpose of these hearings throughout the coun-

". . . a federally-dictated cost containment program is not necessarily the answer."

try was to determine what type of national health insurance legislation could be passed through the Congress, not to determine if the people really wanted national health insurance. We are disappointed that the administration has decided that a national health program is inevitable — we don't think it is. I would, nevertheless, like to discuss the issues as we see them in Oklahoma.

No one could deny the effect that increased costs have had upon every part of the American society. For the last few years we have all been forced to live with inflation which approaches double digit figures, and as a result, the cost of all goods and services has risen. Today it is estimated that the yearly cost of medical care is somewhere between \$118 billion and \$135 billion — almost \$630 for every man, woman and child in this country today. But to say that these costs are in any way unnecessary, out of line or the fault of the medical profession itself is an injustice, and untrue.

In addition to inflation, which government is largely responsible for, several other items have contributed significantly to the increase in the cost of medical care. First of all, there have been remarkable improvements in clinical and technological resources in the past few years, all of which cost money, and none of which we want to do without. Additionally, the number of eligible recipients for government-sponsored health care programs has increased markedly

"We think we have the resources to solve these problems, but they must be handled at the local and state level."

as has the demand for these services. Add to that the soaring cost for professional liability insurance, (up as much as 400 per cent in some states) longer life spans and additional illness-related expenses, it is easy to see why the cost of health care has gone up. While costs are and should be a major concern to us all, a federally-dictated cost containment program is not necessarily the answer. We think we have found a better solution.

In November, 1974, when the Department of Health, Education and Welfare handed down strict federal regulations on hospital utilization review, it was soon discovered that the unique traits of Oklahoma and our small rural hospitals were completely ignored. The federal system, which demanded that concurrent utilization review be conducted by all hospitals, was simply unworkable in Oklahoma and would have resulted in the closing of nearly 1/3 of all

the hospitals in this state with most of these being rural hospitals where the federal government says it is committed to increasing health resources. As an alternative, the Oklahoma State Medical Association, with the help of other health organizations, put together a program called the Oklahoma Utilization Review System which was designed for Oklahoma hospitals by Oklahomans. This is a system of

"There is no reason to believe that a federal bureaucracy which has contributed to increased health care costs can in any way effectively control them."

retrospective hospital utilization review which accomplishes all the objectives of the federal system at a lower cost and allows Oklahoma's 50 or so smaller hospitals to meet utilization review criteria and remain in operation. The OURS plan has now been in operation for approximately six months, and it appears that before the year is out, as much as \$20 million may be saved . . . and this estimate is based upon care rendered to patients whose bills are paid with federal-state dollars. Obviously greater savings are accomplished if we consider the entire patient census. The OURS plan will cost about \$1.21 per claim compared with \$15 for some federally-mandated PSROs. Following are some of the results of the OURS plan:

"These are just a few examples of the ways in which Oklahomans are solving Oklahoma problems through personal and local initiative."

- Medicare-Medicaid claims dropped by 8%.
- The number of hospital days dropped from 779,000 to 754,000.
- The number of claims per thousand eligible recipients dropped from 169.7 to 154.9.

- The number of hospital days per thousand eligible recipients dropped from 1,475 to 1,450.

In another effort to contain costs, our association's Claims-Review Committee reviews between 350 and 400 insurance claims per year to assure that the cost for physician services are in order. These physicians spend many hours studying cases and in meetings, and they receive no compensation whatsoever.

So the Oklahoma State Medical Association and its members, by constantly reviewing hospital and physician services, *are* committed to holding down the cost of medical care while providing the maximum in quality. Until recently we had not had the responsibility nor the authority for cost containment. Given that task, we have demonstrated our ability to perform. If these and other such problems are to be dealt with successfully, the help of the medical profession and the health-care industry must be solicited. We think we have the resources to solve these problems, but they must be handled at the local and state level. Private initiative and health education are two good ways of accomplishing savings in medical care; federal legislation is not. There is no reason to believe that a federal bureaucracy, which has contributed to increased health care costs, can in any way effectively control them. We think a better way is through state plans of health education, health economics, disease prevention and common sense.

ACCESS AND DISTRIBUTION

One of the least credible and yet most often lodged complaints against the present health care system is that adequate health care is not accessible to this country's poor citizens, and physicians in this country are maldistributed, thus causing large gaps in health care coverage. Opponents of our health system persuade us to believe that more and more people in this country are without any type of medical care and that a conspiracy exists within the health care industry to hold down the number of physicians, dentists, nurses, etc. Nothing could be further from the truth.

No country today provides more health care services of a higher quality to more people than the American health care industry. Contrary to what is said, low income Americans actually see their physicians more often than do high income Americans, and there is little or no difference between the various races in the frequency of medical visits. HEW figures prove that qual-

ity medical care is available to almost all Americans, regardless of race, color, creed, income or other variables. HEW figures also indicate that the average American is only 17.2 minutes away from a doctor's office, a clinic or a hospital . . . not bad considering the moans of maldistribution we so often hear.

National statistics also state that 2.9 million persons visit their doctor each and every day, and that the number of physicians in this country has increased over 35% since 1963. Today there are 184 physicians to care for every 100,000 people in this country, compared to a ratio of 150 per 100,000 only a dozen years ago. The United States now has more physicians per capita than does Canada, England, Sweden or any other western European country with the exception of West Germany. We often hear that our country is the only Western, industrialized nation without a national health insurance program, but let me point out that we also have better hospitals, more doctors and better care. Since 1966, 28 new medical schools have been

" . . . it would hardly seem wise to destroy our system of providing health care which has evolved over hundreds of years."

added in this country, bringing the total to 116, with 3 more on the way. By the 1980-1981 school year, the number of medical school graduates is expected to nearly double over that of 1971.

These statements are not to imply that we do not have distribution problems. But again, in Oklahoma, we've faced up to the problem of distribution and have done something about it. In 1975 the Oklahoma State Medical Association helped form the Oklahoma Physician Manpower Training Commission. Our studies had shown that 75 to 80 percent of all residents established their lifetime practices in or about the location where their residency training was taken. While the University of Oklahoma School of Medicine had plans to increase its graduating class from 92 in 1968 to 200 in 1979, resources were not available to increase the number of first-year residency positions by similar margins. This meant that while Oklahoma would be producing over twice as many

physicians, all but 85 or so would be forced to leave the state for residency training. The Oklahoma Legislature established the Physician Manpower Training Commission to work on this problem and also to encourage more physicians to establish their practices in rural Oklahoma. Since the Training Commission was

"There is little or no reason to believe that a national health care scheme could provide comparable coverage at a lower cost."

established two years ago, 84 new MD and DO residency positions have been established . . . now equaling 86.7% of the required number. By 1979 there should be more residency positions in Oklahoma than are required, allowing us to be a physician-importing state rather than a physician-exporting state.

During this same time the training commission has administered a rural medical scholarship program which has granted financial assistance to 60 medical and osteopathic students. In return for this assistance, these students have agreed to return to Oklahoma communities with a population of 7,500 or less to set up their practices. The commission has also administered a community-matching program through which medical and osteopathic students contract to practice in small Oklahoma communities in return for student loans. Currently 32 students are enrolled in this program who have agreed to return to 30 rural Oklahoma communities. By the way, 15 of these communities are located in so-called federally designated health manpower shortage areas. These are just a few examples of the ways in

"American medicine is winning the fight against disease in this country."

which Oklahomans are solving Oklahoma problems through personal and local initiative.

Certainly there are people who need medical care that do not understand how to gain access

to the system, but in our state they appear to be few. If a serious problem of access and distribution exists, it does not exist in the state of Oklahoma, and Oklahomans should not be subjected to a monolithic federal program founded for the purpose of solving problems that don't exist. Only a year ago the Center for Economic and Management Research at the University of Oklahoma conducted a survey and found that 91.2% of the persons surveyed experienced no problems in obtaining medical treatment in this state, and that 74.5% have a regular family doctor. A quality health education program in our public school system would help alleviate the problems of access.

COVERAGE

By the federal government's own estimates, over 90% of the people in this country are presently covered either through private health insurance, government programs such as Medicare and Medicaid, or through some other system such as the Veterans Administration. Even if we were to acknowledge that 8 to 10% of the population is without adequate health insurance (which we do not), it would hardly seem wise to destroy our system of providing health care which has evolved over hundreds of years. According to information which is available from the Health Insurance Association of America, 86% of the people under age 65 now have private health insurance which covers hospital expenses. Likewise, 82% of that same group has insurance that covers surgical expenses, 77% which covers medical expenses and 78% which covers catastrophic illnesses. Add to

"... it, (National Health Insurance) is an idea whose time has come and gone."

that an estimated 22.5 million persons or about 11% of the United States population which is on Medicaid, and you will find that most people in this country are indeed protected by some form of health insurance already. Of course, almost all of those over age 65 are covered by Medicare, and approximately 40 to 50% of Medicare reci-

ipients are also covered by some form of private health insurance.

Obviously most major illnesses involve hospitalization charges, so we should analyze those persons who are without *private* hospitalization insurance and try to find out why. According to the National Center for Health Statistics, 77.8% of our population under age 65 is covered by a private hospital insurance, 20.1% is not covered, and the insurance status of 2.1% of the population is not known. Of the 20.1% who said they did not have hospital insurance, only 8.1% said it was because of cost. Another 6.4% said they did not carry hospital insurance because another type of aid was available, and 2.1% said they did not believe in insurance or had good health. 0.4 said they were dissatisfied with the previous insurance, and another 0.4 said insurance was not available to them. 2.3% listed other reasons.

According to Oklahoma statistics, just over 70% of the people in this state are covered through private insurance and nearly 50% have used this insurance within the past year. Of those polled, 64% said their insurance covered most of their medical expenses, 18% said private insurance covered all of their expenses and only 14% said private insurance covered few of their expenses. On top of that layer of private insurance, nearly 35% of the Oklahomans polled said they were eligible for some form of government paid health insurance or health care. Of those, 50% said government programs paid for most of their health care costs, 34% said government programs paid for all of their health care costs and only 12% indicated few of their expenses were covered by government programs.

It is obvious that a crisis in terms of availability and coverage does not exist nationwide and certainly does not exist here in the State of Oklahoma. It is also obvious that the private insurance industry and social programs already in existence have combined to offer the American people adequate health care coverage. There is little or no reason to believe that a national health care scheme could provide comparable coverage at a lower cost.

QUALITY

One topic this HEW hearing has not chosen to investigate, but one we at the Oklahoma State Medical Association feel is very important, is that of quality. I don't believe anyone here

today would dispute the fact that the citizens of the United States enjoy the best health care and the best health care facilities in the world. This is not by sheer circumstance or accident, but it is a result of a system of medicine which was built upon the same system this country was built upon . . . that of free enterprise.

"There is absolutely no reason to believe that bogging down our health care delivery system with more Washington red tape and Washington bureaucracy would in any way make us any healthier or wealthier."

Life expectancies for both males and females in the United States today is higher than it has ever been before. Similarly, infant and maternal mortality and morbidity rates are lower than they've ever been. American medicine is winning the fight against disease in this country. For example, between 1970 and 1975 the number of deaths caused by heart disease went down 6.4%. The number of deaths caused by stroke decreased by 9.9%, influenza and pneumonia by 12.6%, deaths during early infancy by 39.9%, diabetes mellitus by 6.7%, arteriosclerosis by 12.2%, cirrhosis of the liver by 2.6%, and bronchitis, emphysema and asthma by 27.6%. The rate of death for all causes decreased by 5.2%. Among the top ten killers, only the rate of cancer increased during that period,

". . . Oklahomans should not be subjected to a monolithic federal program founded for the purpose of solving problems that don't exist."

and this increase can be attributed to environmental and other factors. The fact that bronchitis, emphysema and asthma dropped from the top ten killer list and were replaced by suicides and homicides is indicative of some of the social problems which are currently impacting upon the health of our citizens.

As I stated earlier, tremendous strides have

also been made in maternal deaths and infant deaths. Between 1950 and 1975 the number of maternal deaths per 100,000 live births in this country dropped from 83.3 to 10.8. The number of infant deaths per 100,000 live births dropped from 29.2 in 1950 to 16.1 in 1975. No one will dispute the fact that medical care in this country is more expensive than it was in 1950 or 1960 or last year, but it is also obvious that the quality of medical care is much better than it was in 1950, 1960 or even last year. It's been said so many times that it almost sounds trite, "But what type of price tag can you put on a human life?"

Total body scanners cost up to \$500,000, electron microscopes \$60,000, linear accelerators between \$150,000 and \$300,000, a premature nursery, \$100,000 for a six-bassinette unit, a surgical suite, \$300,000 and a coronary care unit, \$150,000. All of this and much of the rest of our so called "space medicine" seems expensive until you or someone in your family has an accident or disease which requires it! At that point, the cost-effectiveness goes up remarkably.

"We are disappointed that the administration has decided that a national health program is inevitable . . ."

It is estimated that it costs approximately \$35,000 to find a single case of cervical cancer by mass screening. And yet when the Oklahoma Cervical Cancer Screening program lost its funding this year, the public was enraged . . . and well it should have been. Health care in many ways is a luxury, but it is a luxury we all want. I doubt that given all the facts very many of our citizens would favor placing a lid on the quality of hospital and medical care as the current Hospital Cost Containment bills pending before Congress would require. And yet a system of national health insurance which would be built on this foundation is being championed by our current administration and by the Secretary of the Department of Health, Education and Welfare.

The United States health care delivery system provides more and better care for its citizens than any other system ever devised.

Stories of British citizens waiting up to two years for elective hernia operations are not horror stories designed to scare the American public; they are absolutely true. Whenever we cut back or "CAP" the number of dollars committed to health care and the number of dollars committed to the overall health care system, or when we reject technological advances that relieve misery and save lives, because they cost too much, we are cheating the people of this country and lowering the quality of care.

SUMMARY

We are often told that national health insurance is an idea whose time has come, but according to a recent Gallup poll, it is an idea whose time has come and gone. Between 1972 and 1976 the percentage of people wanting the federal government to run a national health insurance program dropped from 40% to only 29%. Hardly a mandate.

According to the study I quoted earlier by the University of Oklahoma Center for Economic and Management Research, nearly 80% of Oklahomans are satisfied with their health, 91% said they did not have problems obtaining medical treatment, nearly 75% said they have a regular family doctor, and nearly 87% said they were satisfied with their health care. Less than a majority favored national health insurance, and even fewer favored it when it was accompanied by a tax increase.

There is support for a national health care

plan, some because it seems inevitable, some because it holds short-term economic benefit for its supporters, but much of it seems to be with health planners in Washington. The facts show that the American health care system provides the best care available anywhere in the world, and that private insurance companies provide insurance coverage for a vast majority of our people. I would not stand here today and tell you that there are no problems with the American health care system. There are cracks in the coverage, there are problems of access and distribution, and there are some cost considerations we must address. It appears that these problems affect somewhere between 10% to 20% of our population but do not, however, point toward national health insurance. They point instead to personal and private initiative and private enterprise.

Americans have shown an ability to solve their own problems without government intervention. There is absolutely no reason to believe that bogging down our health care delivery system with more Washington red tape and Washington bureaucracy would in any way make us any healthier or wealthier. Given the opportunity, American medicine can and will solve these problems and can and will continue to provide its patients with the best possible medical care.

It's all a matter of priorities, and at the Oklahoma State Medical Association, our priorities lie with the health of our patients.

Mr. Chairman and members of the panel, I appreciate having had the opportunity to make this presentation, and I would be pleased to answer any questions anyone might have. □

An Oklahoma Physician's Perspective of National Health Insurance

By George Kamp, MD, President-elect,
Tulsa County Medical Society
Presented by John H. Smith, Jr., MD

Editor's Note:

The following paper was drafted by Dr George Kamp, President-elect of the Tulsa County Medical Society and presented by Dr John H. Smith, Jr., a member of the Board of Directors of the Tulsa County Medical Society. Dr Kamp was one of the panelists for the HEW hearing in Tulsa and therefore it was felt that it would not be appropriate for him to present the paper he prepared.

Like the position paper of the OSMA, this paper brings out some important points Oklahoma physicians should consider as the national health insurance debates grow stronger and louder. Please note that both this paper and the OMSA position paper choose to identify a very important fourth factor which HEW ignored . . . QUALITY.

For a physician to begin a discussion of any significant length on the subject of national health insurance is rather an unusual experience. In my observation, most doctors' discussions of national health insurance in Oklahoma tend to be like our Oklahoma thunderstorms — short, noisy and unpleasant.

We will certainly hear many impressive statistics today delivered by equally impressive

speakers. Appropriate caution must be used in evaluating these numbers, however. To emphasize the need for caution I would quote no less an authority than Mr. Douglass M. Richard, who is Regional Medicare Director of the Health Care Financing Administration in Atlanta, Georgia. Writing in the *Journal of the Medical Association of Georgia* in May of this year he stated, "As a lifelong practicing bureaucrat, I have available to me all the statistics one would need to fill up not just the space devoted to this one article but rather this entire issue. I could "prove" the whole country's going under if we don't get ourselves a national health insurance program and soon. And, yes, I could also "prove" national health insurance is the last thing we would need, and would in fact have us bordering on the brink of bankruptcy very soon after it took effect."

Another most important cautioning thought occurs to me. We must be very sure that the right questions are being asked in regard to national health insurance. So many emotional treatments of the so-called health care "crisis" have received such wide publicity that it is all too easy to find ourselves locked in debate about *which* federal solutions should apply, rather than the more fundamental question of *whether* the problems do in fact lend themselves to intervention of federal government. Indeed, the

emotionally loaded term of health care crisis is almost certainly an exaggeration in itself.

There is, in fact, a great deal of evidence that overall high quality health care has been made available to an increasingly large number of people. The ratio of physicians to general population has steadily improved in the United

"... most doctors' discussions of National Health Insurance in Oklahoma tend to be like our Oklahoma thunderstorms — short, noisy and unpleasant."

States, and in fact is much better than in some of the major European countries to which we are often compared. The private health insurance industry is one of the fastest growing in America. Even the statement of issues document which accompanied announcement of this forum indicates that some 88 per cent of the US population is covered by existing private and public health financing programs.

The three sets of problems which this background document addresses are coverage, access, and cost, all as referable to national health insurance. It occurs to me that a fourth equally vital issue has been most conspicuously omitted from this background material. This fourth issue is as vital to balanced consideration of the very complex problem of national health insurance as is the fourth leg of a chair. However, I would like to comment on the three preselected problem areas first.

"It would seem hard to justify the term crisis when almost 90 per cent of our population is covered by some form of health insurance."

Coverage. It would seem hard to justify the term crisis when almost 90 percent of our population is covered by some form of health insurance. Rather, the conclusion would seem to be that the private system in America works

rather well in this area. To be sure there are problems with the cost of truly catastrophic illness, but more than 149 million Americans are already insured against catastrophic illness at the present time. Perhaps many of the proposals introduced in Congress should actually be called national financial disaster insurance rather than national health insurance, as the relationship to health appears rather incidental. Shifting health insurance coverage from the private sector to the government certainly will not reduce its cost. All of us would simply pay the inevitably larger bill as taxpayers rather than as insurance subscribers.

The second problem area mentioned is that of access to care. Our source document makes the statement that "millions of Americans do not receive necessary care because they live in areas where there are not enough health care providers." This has surely got to be one of the best examples of a non sequitur that I have encountered in some time. The statement would imply immobility in what is probably the most

"Shifting health insurance coverage from the private sector to the government certainly will not reduce its costs."

mobile society in the world. There are hospitals of 25 bed size or greater within 25 miles of all but two percent of our population. Only one-tenth of one percent of our population has to travel more than 50 miles to such a hospital. Another aspect of the access to care problem consists of a lesson from the nationalized British and Swedish systems. Concerning the Swedish experience, I offer a brief quote from a speech made by Congressman Bill Chappell at the National Convention of Radiologists Business Managers in 1976. Mr. Chappell states "There is hardly a single hospital in Sweden where there are not long waiting lists for all kinds of hospital care. It was estimated that in Stockholm alone there were more than 4,000 waiting to enter hospitals — 1,800 for surgery." Concerning the British experience, I quote from Mr. R. Anson-Owen, Administrator, High Wycombe Health District, "It was expected that if the mass of untreated sick people could be given rapid access to hospital service, the

amount of serious illness in the community would diminish and the National Health Service would become more and more akin to a holding operation. This proved to be totally inaccurate." Additionally, from the British experience I quote Mr. Peter H. Lord, Senior Surgeon at Wycombe General Hospital, "It is a lamentable fact that in some parts of the United Kingdom patients wait over a year for non-urgent operations." Surely, it would seem very doubtful that a crisis exists in access to care, and even more doubtful that a universal national health insurance would solve such access problems as do exist.

Concerning health care cost; all of us would agree that this is a major problem area. We must, however, recognize that the federal government itself has been a major factor in the rise in the health care cost. On the one hand, alarmists who write about this problem deplore the rising costs and attribute them in part to the system of third party payers being so frequently utilized. On the other hand, these same writers

"Is this the same sort of federal bureaucratic management efficiency as demonstrated in our postal service and Amtrak?"

advocate a universal national health insurance which would completely remove the price factor as a rationing and allocating mechanism. Without prices to limit demand for care, demand and costs spiral. Additionally, the unnecessary layer of paid federal bureaucracy in a universal national health system would add further to costs. The costs of the Medicare and Medicaid programs were greatly underestimated initially by HEW Economists writing in a study for the Institute for Contemporary Studies, edited by Professor Cotton Lindsay, Professor of Economics at the University of California, estimated that the federal government would spend between \$564 and \$957 to produce additional health care worth \$108. Is this any system to provide cost control?

Relating to the problem of costs, again I would like to quote Mr. Anson-Owen on the British experience. "It has produced a plethora of administrators at too many levels, all hard working worthy men and women but doing

work which is duplicating that being done by other administrators, another bureaucratic tier above or below them. The result is increased costs with no benefit to the patient, further and justified hostility from the doctors, turgid lines of communication and immense internal stresses and strains within the bloated bureaucratic machine itself." Can we not learn from the British experience? Our source document states

"There is hardly a single hospital in Sweden where there are not long waiting lists for all kinds of hospital care."

that one of the basic principles sent forth by President Carter for national health insurance plans is that of management efficiency. Is this the same sort of federal bureaucratic management efficiency as demonstrated in our postal service and Amtrak? Surely, the market place is truly our best regulatory agency. It operates with far greater speed, effectiveness and freedom than any federal bureaucracy. If national health insurance is organized on a cost plus basis similar to that seen in Medicare and Medicaid programs, the comparatively small part of the market which currently purchases hospitalization out of pocket will be eliminated entirely. Thereby, the only market force positively influencing the economy in this area will be eliminated.

Related to problems of health costs are allegations that the supply of physicians is controlled to maintain a monopoly. Any objective analysis of the information completely fails to

"Surely, the marketplace is truly our best regulatory agency."

substantiate this claim, however. Since 1965 the number of physicians in the United States has increased at a rate three times that of our population growth. Auxiliary medical personnel have increased at a rate four times that of population growth. In 1960 there was one

physician for every 712 Americans. In 1972 there was one physician for every 600 Americans. There is simply no support for national health insurance in claims of a physician monopoly. The problems of health care costs must indeed be attended to vigorously and promptly. I submit, however, that their solution is much more likely by the joint effort of the professional medical community, our private health care insurers, hospitals, management and labor rather than by bureaucratic control.

The medical profession is quite concerned with the rising cost of health care. The American Medical Association has established a Commission to study the problem and come forth with recommendations. With the great complexity of causes in rising health care cost, including inflation, changing demand, changing technologies, the added cost associated with the malpractice litigation problem, and multiple other causes it seems most unlikely that federal legislation alone can produce solutions.

What are some of the attitudes of Oklahomans which are linked to the issue of national health insurance? A survey conducted by the Center for Economic and Management Research at the University of Oklahoma in November of 1976 relates to this matter. Fewer than two per cent indicated they were dissatisfied with the health care which they received. Over 90 percent reported no problems in obtaining medical treatment when they needed it. Of those who reported problems in getting medical treatment when they needed it, fewer than half indicated that cost was a limiting problem. Of those who objected to seeing a doctor, the largest single category cited was that of fear of seeing the physician, not cost or inconvenience involved. Over 82 per cent indicated that their health insurance covered most or all of the expenses and over 70 per cent indicated that they had *private* health care insurance. Fewer than 50 per cent answered yes to a question as to whether the federal government should establish a national health insurance program based on taxes. These responses certainly are not indicative of a crisis atmosphere, nor do they provide any wave of demand for tax based universal national health insurance.

Most Americans prefer a freedom of choice. Our present medical system is a pluralistic one which gives Americans this freedom of choice in

their health care. Preservation of this freedom is important.

Important also is the fourth factor which was not mentioned in our outline. That factor, I submit, is quality of health care. Very few claims are heard from even the most ardent

"Can we not learn from the British experience?"

advocates of universal national health insurance that it would improve the quality of medical care. In fact, it certainly would not. Such a program would have a great demoralizing effect on many dedicated physicians currently in the private practice of medicine. Already, I hear brilliant young students saying that they would not enter medical school if our profession is nationalized.

Again, not even the most ardent advocates of such sweeping changes as are proposed in the Kennedy Corman Bill dare hold up present federalized medicine in the civilian and military federal institutions as a marked improvement on the quality of care compared to that of the private sector.

Professor Lindsay — an economist I remind you — concluded in the book I mentioned earlier, "The major proposals for national health insurance concern a major reorganization of the health industry. The proposals can be implemented only at great expense and will almost certainly aggravate inefficiency and waste. The small remaining problems can easily be solved by minor adjustments in present programs. They do not require overhaul of the entire industry."

Ladies and Gentlemen, I ask you to consider what your physician's primary concern should be the next time you are ill or injured. Do you want his concentration on cost effectiveness ratios, capitation fees, a welter of government forms and red tape, and such other bureaucratic delights as statistically determined criteria for admission to the hospital, length of stay, and patterns of care. Or, perhaps, do you want his primary concern to be intelligent and compassionate care of a sick fellow human being? □

Oklahoma Doctors To Study BHS

EDITOR'S NOTE:

On November 22, 1977, approximately 150 Oklahoma physicians and spouses will leave Oklahoma City Will Rogers airport en route to London, England. The purpose of the trip is to study firsthand the National Health Service which has been in operation in England since mid-1948. Headquarters for this unique tour will be the Tower Hotel in London, and the week-long session will include firsthand reports from high-ranking officials in the British Health Service. The purpose of the trip is to decide once and for all which, if any, of the qualities of the BHS would be appropriate for implementation in the United States.

Host for the tour is OSMA President, Dr C. S. Lewis, Jr., a practicing cardiologist in Tulsa, medical director of St. John's Hospital, and a well-known expert in the field of medical education. Dr Lewis' medical education background and his experience and knowledge of other health care systems make him an especially appropriate host for this unique program. Also slated to take part in the discussion is David McCurdy, JD, who, until several months ago, was on the Oklahoma Attorney General's staff. McCurdy, who many physicians will recognize as the author of a special report of the Attorney General on Medical Malpractice Insurance in Oklahoma, recently received a fellowship to study economics at the University of Edinburgh in Scotland. He and his wife, Pamela M. McCurdy, MD, who is a practicing physician in Norman, are the authors of "The British Experience: Thirty Years of National Health Insurance" which may be found in this special section of *The Journal*. Also slated to take part in the program are Dr D. H. Ervin, President, Royal

College of General Practitioners; Geoffrey Weston, Deputy Ombudsman, National Health Service; Reginald S. Murley, President, Royal College of Surgeons; Dr D. Geraint James, Royal Northern Hospital; and several other speakers yet to be named.

The program will emphasize working tours of various health care facilities in England and a detailed study of the economics of the British Health Service and medical education. The following is the tentative program for this special OSMA-sponsored seminar. For additional details and a report on the various findings of this seminar, see future issues of the *OSMA Journal*.

TENTATIVE PROGRAM OSMA

NATIONAL HEALTH SERVICE SEMINAR
London, England November 22-30

P.M., November 22, 1977

Depart Will Rogers Airport, Oklahoma City for London, England

A.M., November 23, 1977

Arrive Tower Hotel, London, England

6:45 p.m. - 7:45 p.m.

Welcome to London Reception

The Charles Dickens Inn (Walking distance from the Tower Hotel)

EVENING FREE

THURSDAY, NOVEMBER 24

A Review of the British National Health Service
Presiding: C. S. Lewis, Jr., MD

8:30 to

9:00 a.m.

A brief historical review of the British National Health Service
David McCurdy, JD

news

- 9:00 to
10:00 a.m. The Development of National Health Service
- 10:00 to
10:45 a.m. General Practice in the National Health Service
Doctor D. H. Irvin, FRCGP
President, Royal College of General Practitioners
- 10:45 to
11:00 a.m. Coffee Break
- 11:00 to
11:45 a.m. Specialization in the National Health Service
(Speaker to be announced)
- 11:45 to
12:30 p.m. The Work of the Health Services Commission
Mr. Geoffrey Weston, Deputy Ombudsman, National Health Service
- 12:30 to
2:00 p.m. Lunch—The Carvery—Tower Hotel
- 2:00 to
3:00 p.m. Private Enterprise Medicine in Great Britain
Speaker: Medical Director of Wellington Hospital
- 3:00 to
4:15 p.m. Tour of Wellington Hospital
- 4:15 to
4:30 p.m. Transport to Royal College of Surgeons
- 4:30 to
5:15 p.m. Tour of the Royal College of Surgeons
Speaker: Reginald S. Murley, FRCS, President, Royal College of Surgeons
Topic: A Surgeon's View of National Health Service
- 5:15 to
6:30 p.m. Tour of College and Hunterian Museum (John Hunter Surgical Museum)
- 8:00 to
10:45 p.m. Dinner at the Beefeater (A de-

lightful fun-filled evening in an authentically created medieval atmosphere)

FRIDAY, NOVEMBER 25

- 8:00 to
10:30 a.m. Travel and Lecture en route to Birmingham
- 10:30 to
12:30 p.m. Tour of Birmingham Health Authority
- 12:30 to
1:30 p.m. Working lunch and lecture
- 1:30 to
3:00 p.m. Travel and Lecture en route to Oxford
- 3:00 to
5:00 p.m. Tour of the Oxford Area Health Authority
- 5:00 to
6:30 p.m. Travel and Lecture en route to London

EVENING FREE

**SATURDAY AND SUNDAY OPEN
MONDAY, NOVEMBER 28**

- 8:30 to
12:00 p.m. Tour of Royal Northern Hospital
Dr. Geraint James, MD FRCP
- 12:00 to
2:00 p.m. Lunch—King's Fund Center
- 2:00 to
4:30 p.m. Private Financing of Medical Education and Medical Research in the United Kingdom (Speaker to be announced)

EVENING FREE

TUESDAY, NOVEMBER 29

- 8:30 to
12:30 p.m. Medical Education in Great Britain — Undergraduate and Postgraduate (Speaker to be announced)

AFTERNOON FREE

WEDNESDAY, NOVEMBER 30

Return to Oklahoma City

Planning Council Recommends AMA Resolutions

The OSMA Council on Planning and Development has recommended that a resolution be submitted at the AMA interim-meeting in December calling upon the national organization to withdraw its support of Health Systems Agencies, Professional Standard Review Organizations, the Comprehensive Health Care Act of 1977 and all other such programs which involve the federal government in health care. The resolution was suggested by Dr Ed Calhoon, AMA Delegate from Beaver.

Dr Calhoon said that he was amazed at the attitude displayed by HEW Secretary Joseph A. Califano at the AMA meeting in June. Dr Calhoon said Califano totally disregarded the beliefs and feelings of the country's physicians when he made his speech calling for more federal control of the health care profession. (The entire text of Califano's speech can be found in the August *Journal of the Oklahoma State Medical Association*.)

Although Dr Calhoon also called for the AMA to conduct a massive public education program, the Council eventually decided to submit a separate OSMA resolution on public relations. In all, the Council on Planning and Development approved the introduction of four OSMA resolutions: (1) A resolution calling on the AMA to withdraw its support from PSROs, HSAs, the Comprehensive Health Care Act of 1977, etc.; (2) A resolution calling upon the AMA to conduct a massive public relations/information program designed to inform the American public about the advantages of our present health care system; (3) A resolution calling for the federal government to reimburse in full for federal programs, and (4) A resolution calling upon the federal government to be required to pay separately for those health associated costs brought about by federal regulations and increased numbers of beneficiaries.

This action and a full review of all OSMA Council activities was taken during a two-day meeting of the Council on Planning and Development which was held September 23-25, 1977. The Council also took the following action:

- Recommended that excerpts from county resolutions to the OSMA House of Delegates be run in *The Journal of the Oklahoma State Medical Association* in order to bring about more physician interest. The Council also suggested

that the OSMA staff be made available to county societies which need help in drafting resolutions for consideration.

- Reviewed a lawsuit against the Food and Drug Administration which the OSMA has entered into contesting an FDA decision on package inserts for estrogen.

- Voted to send meeting notices and minutes from all Board of Trustees meetings and Planning and Development Council meetings to trustees and alternates as well as Council chairmen and OSMA officers in order to keep the entire OSMA leadership informed of all association activities.

- Endorsed the activities of the Council on Governmental Activities and accepted the report on the performance of the new OSMA lobbyist in Washington, John H. Montgomery.

- Voted to suggest that OMPAC solicit information from county medical societies on political candidates from their district and additionally voted to request that OMPAC poll its contributors on political issues and races.

- Suggested a synopsis of the recent report by the Select Committee on Medical Technology be run in *The Journal of the Oklahoma State Medical Association*. This report dealt with CT Scanners.

- Suggested that the Council on Medical Services give additional study to a proposal to form an Allied Health Professionals Presidential Council. This Council was suggested as a means of getting the presidents of various health related organizations together to help formulate policy which affected all the various organizations.

- Agreed that the OSMA Executive Director and at least one physician should attend the American Medical Association's School on Collective Bargaining in the coming year.

- Voted to suggest to the Board of Trustees that "the OSMA attempt to provide reimbursement through third party carriers for physicians performing claims review activities."

- Approved the Council on Public and Mental Health's adopted project of a statewide program on cardiopulmonary resuscitation. The Council on Planning and Development also agreed that an informational campaign should be conducted each August as a reminder to parents to immunize their children.

- Reviewed the proposals of the Insurance Company of North America and Hartford In-

insurance Company on the OSMA-sponsored professional liability insurance. The Council reviewed tentative proposals from each company but deferred any action to the Council on Members Services, which is responsible for this program.

- Appropriated funds for syndicating the series of public service announcements which was produced this year by the OSMA. Since August 1, these announcements have received approximately \$20,000 in free air time, and the Council on Professional and Public Relations, which produced the announcements, wants to syndicate them nationwide. The Council on Planning and Development also approved a suggestion that additional ten-second public service messages be produced and distributed to Oklahoma television stations.

- Voted to continue production of *The Journal of the Oklahoma State Medical Association* and to seek additional advertising for this publication.

- Approved a method by which OSMA members may contribute to an endowment fund for a professorial chair or professorship in continuing medical education at the University of Oklahoma Health Sciences Center. This program will be entirely voluntary, and the endowment effort will require a period of years to accomplish.

- Reviewed the activities of the Council on Medical Education in regard to the OSMA program of continuing medical education which will go into effect January 1, 1978. (For additional details, see the interview in the October issue of *The Journal of the Oklahoma State Medical Association*.)

- Reviewed the activities of the newest OSMA Council . . . the Council on Scientific Assembly. This Council was approved at the last OSMA annual meeting and has now been appointed. Its chairman is Dr R. LeRoy Carpenter. It is responsible for conducting and overseeing scientific programs for the OSMA and other allied health organizations.

- Reviewed and referred to the Board of Trustees a plan to expand OSMA headquarters.

- Reviewed and accepted a report by Dr Armond H. Start on the financial status of the Oklahoma State Medical Association. Dr Start, OSMA Treasurer, presented the budget for 1977-78 and expenditures through September 1, 1977.

- Reviewed the reorganization of the Physicians Review Panel. This panel, formerly known as the Grievance Committee, was reorganized during the last organizational year by then President, Dr Orange M. Welborn. Dr Welborn, who is now chairman of the Council on Planning and Development, presented a brief report which the Council accepted as an informational item.

- Reviewed early utilization review figures from the Oklahoma Foundation for Peer Review and the Oklahoma Utilization Review System.

These recommendations will be brought to the OSMA Board of Trustees for final action at its November 19, 1977, meeting. □

Environmental Quality Committee Named

OSMA President, Dr C. S. Lewis, Jr., Tulsa, has announced his appointments for the OSMA Committee on Environmental Quality. This committee was approved at the 1976 Annual Meeting of the State Medical Association but was inactive last year. Prospective committee members have spent the last few months deciding how this committee should be organized and determining what its goals and objectives should be. It is organized within the Council on Public and Mental Health chaired by Dr Armond H. Start. Those named to the committee are Dr R. LeRoy Carpenter, Chairman, Spencer; Dr George W. Prothro, Tulsa; Dr Harold G. Muchmore, Oklahoma City; Dr William R. Morris, Oklahoma City; Dr Chester L. Bynum, Norman; Dr John K. Pirtle, Norman; and Dr Larry M. Prater, Oklahoma City.

The Council on Public and Mental Health has also voted to adopt a statewide program on cardiopulmonary resuscitation as its major project for the coming year. This program will be coordinated through the Oklahoma Chapter of the American Heart Association and through local county medical societies. The goal is to make quality CPR courses available to every county in Oklahoma.

The program will be kicked off in December, 1977, and representatives of OSMA will contact officials of all the 43 county medical societies. Physicians interested in participating in the program may contact Dr Armond H. Start, Oklahoma State Medical Association, 601 NW Expressway, Oklahoma City, Oklahoma 73118. □

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It depends, of course, on your age and annual earnings, but the amount can quite reasonably exceed \$400,000.

The total value of all your possessions — property, savings, cars and personal belongings — is only a fraction of what you will probably earn during years of practice. And yet some of you have insured these things and left your earning power unprotected.

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Many Medicaid Problems Government Oriented

The American Medical Association was asked recently to comment on the recent Background Report on Surgery in State Medicaid Programs. This was a staff report of the Subcommittee on Oversight and Investigations of the US House of Representatives Committee on Interstate and Foreign Commerce. Congressman John E. Moss (D-Cal.) is chairman of that subcommittee.

The report showed huge deviations in the number of surgeries being performed in different states and apparently pointed to shoddy medical practice. Upon closer inspection, however, it was found that the problems lay not with the medical profession but rather with the administration of Medicaid itself. In the words of the AMA, "What the current staff report of Congressman John E. Moss' investigating committee reveals is that the Medicaid program is nothing less than an administrative horror.

"The data collected from the various state programs are so inconsistent and so contra-

dictory as to suggest a national scandal. They undermine what little confidence there may be that Medicaid is managed with anything resembling an acceptable level of efficiency."

The AMA went on to say that the Moss subcommittee report should be required reading for anyone who gives serious attention to proposals that would extend government management further into medical care.

The AMA said it heartily endorsed Congressman Moss' statement in his letter of transmittal: "I find it extremely disturbing that there will be an estimated \$20 billion spent under the Medicaid program in fiscal 1978 (at least one-third of it being for surgery), yet the Department (of HEW) is unable to account for such expenditures."

Originally attention focused on one aspect of the report: that survey rates among Medicaid-eligibles were supposedly higher than that in the rest of the population. Whether or not this is borne out by the report is impossible to ascertain. What is obvious, however, is that in many states (Oklahoma being the exception) Medicaid statistics are almost meaningless.

Below, for example, are some excerpts from the report itself:

The available data indicated extreme differences in total surgical rates . . . reported rates of hysterectomies among states varied from greater than 1,000 per 100,000 eligibles in three states to rates of less than 200 per 100,000 eligibles in two states.

"Why are there such extreme variations in the number of (surgical) procedures even within a given state from one year to the next. North Dakota reported 8,000 procedures in 1975 and 48,000 in 1976. Arkansas reported 7,800 procedures in 1975 and 17,000 in 1976. Conversely, Virginia listed 52,000 procedures in 1975 and 22,000 in 1976."

"It is difficult to believe that Pennsylvania reported 60,000 surgical procedures performed under the Medicaid program in 1975 and 379,772 procedures in 1976, an increase of 543%."

"If anyone requires confirmation that Medicaid is a statistical wonderland," said the AMA, "the Moss report should supply it."

Apparently, much of the problem was associated with the manner in which state Medicaid programs were requested to compile data. At first investigation, the data provided by Oklahoma seemed inconsistent also. In all fairness to the Department of Institutions, Social and Rehabilitative Services, however, it should be pointed out that Oklahoma officials quickly saw the problem and corrected their statistics. □

Americans Satisfied With Health Care, Says Gallup Poll

Most Americans are well satisfied with the quality of their health care, a recent Gallup survey indicates.

The American people as a whole rate the quality of their health care quite high, the survey found. Even some groups often thought to be deprived — the elderly and rural residents — believe they receive high quality health care and are well satisfied with it.

The survey also found that the public isn't worried about financing the usual cost of health care, mostly through health insurance. Over half even feel they could meet the costs of a major, long-term illness.

Another survey question revealed that public support for national health insurance varies directly in relation to the public's understanding of how much such a program would cost. Those who think it would be "free," (ie paid for by the government) favor national health insurance. Those who understand that taxes would be increased to pay for the program are much less enthusiastic.

Asked to rate the quality of health care received by people like themselves, the public strongly responds "excellent," the survey found. At the same time when asked to assess the quality of health care for other population groups, the public thinks low income people, older people and people living in rural areas do not get good care. But the older people and the rural people themselves rate their health care as about the same as the average citizen.

Public satisfaction with the last visit to a medical doctor is extremely high — 90 per cent. Most were well satisfied with treatment by the doctor's staff; with the waiting time it took to obtain an appointment; with the care received. Almost eight in ten were pleased with the doctor's explanation of their illness.

Some 69 per cent of the public feel confident in their ability to pay the usual costs of health care. A smaller majority, 51 per cent, are confident they could finance a major illness.

Some 67 per cent of the public feels there is a need for national health insurance. But this figure drops to 40 per cent when the question is expanded to include the added taxes to finance such a program. Those most confident in their ability to pay for their health care see little need for a government program. Among those who feel national health insurance will cost more than their current private health insurance there is little support for a federal program.

And finally, the public is well aware that national health insurance is not a panacea for problems of health care delivery. At least half foresee an increase in the amount of time they would have to wait to obtain an appointment. About half feel there would be an increase in unnecessary visits to the doctor under national health insurance.

The public is undecided as to how best to pay for national health insurance and who should administer the program. Some favor paying through taxes, others through insurance premiums. There is no consensus on who should run such a program, government or private insurance. □

DEATHS

DONALD V. CRANE, MD
1914-1977

A retired Tulsa ophthalmologist, Donald V. Crane, MD, died on September 10, 1977. A native of Syracuse, New York, Dr Crane was graduated from the Buffalo School of Medicine in 1937. His practice was established in Tulsa in 1942 and he retired two years ago. Dr Crane was a Diplomate of the American Board of Ophthalmology, a Fellow of the American College of Surgeons, and a member of the American Academy of Ophthalmology and Otolaryngology.

H. A. ROSIER, MD
1913-1977

A Waurika, Oklahoma physician for over 30 years, H. A. Rosier, MD, 64, died September 22, 1977 in Wichita Falls, Texas. A native of Belton, Missouri, Dr Rosier was graduated from the University of Kansas School of Medicine in 1940. Following a residency in surgery in Cleveland, he established his practice in Waurika.

listed as taking in more than \$100,000 in Medicare payments. Also carried in the new publication are the names of 338 physicians, the groups to which they belong, and the total Medicare payment to the group. Most of these physicians were under the original heading of groups and clinics but were identified at the time by the individual physician's name. In 24 cases of this latter group, an incorrect reimbursement total was in the original list.

HEW officials said recently that present plans are to prepare next time a listing of all physicians who received any Medicare payments in 1976. Estimated cost to the government of preparing this annual listing is from \$700,000 to \$1 million at the start and some \$300,000 annually thereafter.

"I regret any inconvenience for physicians whose records were incorrectly reported on our original list," Secretary Califano said on releasing the list of corrections. "It is essential that we make available more information about the financial aspects of the \$139 billion health care industry . . . It is also essential that such financial information be accurate and relevant. We intend to achieve these objectives in the future." □

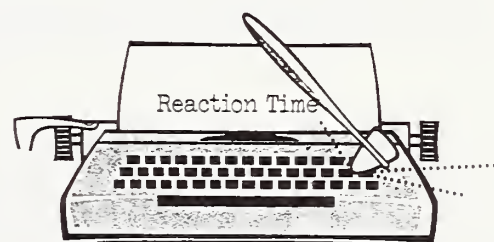
New Medicare List Released

Eight months after publication of an error-ridden list of physicians supposedly receiving substantial Medicare payments in 1975, the government has published a corrected list of physicians receiving large Medicare sums.

Last March, responding to requests from the news media, HEW printed the names and amounts received by 409 physicians and 1,750 groups that did more than \$100,000 of Medicare billing in 1975. The Freedom of Information law compelled this disclosure, HEW said. Receiving complaints from numerous physicians, the AMA checked a sizable sample of the list and found an error rate of more than 60 per cent. Following a protest from the AMA over the high error rate, HEW Secretary Joseph Califano apologized and promised to publish a corrected list.

The new list contains the names and addresses of 64 solo practitioners incorrectly

REACTION TIME



19 June 1977

Subscription Department
Journal of the Oklahoma State
Medical Association
601 N.W. Expressway
Oklahoma City, Oklahoma 73118
USA

Gentlemen:

Enclosed is our check for \$8.50 to cover a one-year renewal subscription to this address. Our records indicate that the June issue is the last

news

we will receive under last year's subscription. A minor typhoid epidemic has prevented our reviewing our subscription list earlier.

Your JOURNAL arrives in excellent condition and all issues have been received, which is great service considering that we are deep in the jungle of the upper Amazon and all mail has to come by small plane.

Sincerely,

Thomas Brown, MD
Medical Director

March 16, 1977

Dr. Mark R. Johnson, Editor
JOURNAL OF THE OKLAHOMA
STATE MEDICAL ASSOCIATION
601 N.W. Expressway
Oklahoma City, OK 73118

Dear Dr. Johnson:

Many people who are allergic to aspirin also are allergic to Tartrazine — especially those over 40 with the symptom complex of nasal polyps and asthma. Recent evidence suggests that aspirin sensitivity with or without nasal polyps may be present in children and adults with intrinsic asthma. In fact, some severe asthmatics may be sensitive to aspirin without realizing it.

It has been estimated that 25-80% of those individuals allergic to aspirin are also allergic to Tartrazine (yellow dye FD&C u5), which is present in some foods, and it is also present in some drugs. Many patients, as well as physicians are not aware of this.

One such example is the pain reliever, Tylenol which has been used as a substitute for those sensitive to aspirin — as it contains no aspirin, nor any Tartrazine. However, the medication "Co-Tylenol" does contain Tartrazine. I was made well aware of this fact because of a patient of mine who was referred to me for angiodema and urticaria.

History revealed that aspirin had been taken just prior to the onset of the urticaria and the

angiodema. Elimination of the aspirin resulted in the elimination of symptoms. He was given a list of drugs containing aspirin to avoid and also a list of drugs and foods containing Tartrazine. He was told he could use "Tylenol".

The patient returned last week with severe angiodema and urticaria. He had not taken any aspirin, but he had taken "Co-Tylenol". On the list of drugs I had given him — this was not mentioned. The company which manufactures "Co-Tylenol" did not give a list of their drugs which contained Tartrazine. A new list has just come out which does list the drugs containing Tartrazine — "Co-Tylenol" is one of these drugs. Tartrazine was not listed on the label of the "Co-Tylenol" as one of the ingredients.

This could cause very severe reactions to someone allergic to Tartrazine — knowing that they could take "Tylenol" — the similarity of names, "Tylenol" and "Co-Tylenol" is very confusing and could be dangerous.

Sincerely,

Claude A. Frazier, M.D.
CAF/ja

BOOK REVIEWS

Manual of Clinical Immunology, edited by N. R. Rose and H. Friedman, 932 pages, Washington, D.C., The American Society for Microbiology, 1976, price \$16.00 (paper) \$20.00 (cloth).

A few years ago the American Society of Microbiology published "Manual of Clinical Microbiology." This proved to be very successful and the present publication represents a companion effort. The editors have coordinated the efforts of some 200 contributors with assistance from an editorial board. It contains a very satisfactory overview of the field of clinical immunology. The book is divided into eleven sections which deal with tests for cellular immunity, humoral immunity, bacterial, mycotic, and parasitic serology, immunohematology, tests for immunodeficiency and for allergic disorders, autoimmune diseases, transplantation, immunology, tumor immunology and other topics.

The references are up-to-date and pertinent. As might be expected no single book can cover everything in depth in this fast moving field. However, this volume provides authoritative information about a wide range of immunologic procedures and disorders. It will be a valuable reference for laboratory directors, medical technologists and clinicians. *Harris D. Riley, Jr., MD*

Basic and Clinical Immunology, Edited by H. H. Fudenberg, D. P. Stites, J. L. Caldwell, and J. V. Wells, Lange Medical Publications, Los Altos, California, 653 pages, 1976, price \$12.50.

This is a paperback book representing one of the well known publications of Lange Medical Publications. It is divided into four sections: basic immunology, immunobiology, laboratory methods and clinical immunology. The latter is divided into fourteen chapters each dealing with a different organ system and the immunologic aspects of disease in that organ system. The basic immunology and immunobiology sections contain adequate summaries of our present understanding of basic immunology. Of particular usefulness to the non-immunologist is a glossary of terms, acronyms and abbreviations used in immunology. A noteworthy feature is the brief interval between the appearance of the majority of the references and the publication of this book.

This is an excellent reference. If the authors are successful in realizing the objective of updating it every two years it will be even more useful. *Harris D. Riley, Jr., MD*

Synopsis of Pathology, 9th edition, by W. AD Anderson and T. M. Scotti, 1161 pages, The C.B. Mosby Company, St. Louis, 1976, price \$15.00.

This book, long a favorite with second year medical students, appears in its ninth edition. This edition has been revised chiefly to accommodate immunologic developments pertinent to human disease. It continues its role in simplifying and orienting students confronted with massive textbooks of pathology and incomplete syllabi. It serves its purpose well. *Harris D. Riley, Jr., MD*

Amebiasis in Man: Epidemiology, Therapeutics, Clinical Correlations, and Prophylaxis. Compiled and Edited by Carlos A. Padilla Y Padilla and George M. Padilla. Charles C. Thomas Publisher, Springfield, Illinois, 1974, 179 pages, \$13.95

This book is written by nine contributors. As stated in the introduction, the purpose according to the editors is to bring together contributions from those whose main professional concern is with the study and cure of amebic infections in man because recently there have been significant new developments in the diagnosis and treatment of this disease. The book contains thirteen chapters. The history, etiology, epidemiology, clinical characteristics, diagnosis, therapy, prophylaxis and public health measures of amebiasis and its complications are presented.

The references are up-to-date and it is well documented. However, there are certain important omissions. For example, under individual prophylaxis the use of halogenated hydroxyquinoline compounds as a prophylaxis against amebiasis is reportedly not justified in view of the hazard of optic damage. The book is a useful reference for those concerned with this problem. *H. D. Riley, Jr., MD*

Two Centuries of American Medicine 1776 to 1976 — by James Bordley III and A. McGehee Harvey. 824 pages, 172 illustrations, Philadelphia: W. B. Saunders Co., 1976, Price \$19.76.

This book, according to the preface, is "to relate in language that can be understood by the interested layman, as well as the physician, an account of the extraordinary advances in medical education and in the prevention and treatment of disease that have taken place during the two centuries of this nation's political independence (1776 to 1976)". The authors go on to state that most of the advances have occurred during the second of these centuries and that in the first century of American history, the role of physician was primarily that of the Good Samaritan. In the judgement of the authors, the one momentous American contribution to the advance was the introduction of surgical anesthesia. The period beginning in the 1870's was a period of fruitful transition for both medical education and medical science. The period also

saw the introduction of technical developments that were to have a profound effect upon medical education and medical practice.

This large book is divided into three sections. They are "Century: 1776 - 1876," "Period of Scientific Advance: 1876 - 1946," "Period of Explosive Growth: 1946 - 1976." Part one contains nine chapters, part two nine chapters and part three thirteen chapters.

Generally speaking, the book provides an easily readable, chronologic account of the history of medicine in this country during the past two centuries. Throughout, the authors remind the reader of pertinent background information including social conditions and the mechanisms and ability to fund research and stress the growing dependence of medicine on many social factors.

Basically this book is a source book providing an account of the basic structure of the history of American medicine. The authors acknowledge some of the limitations. They emphasize they have had to be highly selective, thereby unavoidably laying themselves "open to criticism for both misplaced emphasis and conspicuous omissions." While the addition of much more information would have made the volume unmanageable, it is still puzzling how the authors selected certain persons to be featured in the various sections. In several places the documentation is not adequate. The index omits names of certain persons included in the text. One of the appendices entitled "Chronological Summary of Major Events in American Medical History" is particularly useful. The references are listed at the end of the book by chapters and are made up of what the authors consider the more important references dealing with that particular chapter.

Like most books written by persons connected with Johns Hopkins (as is the case with authors, both of whom were or are associated with Johns Hopkins) it seems to suffer from the "Hopkins syndrome" because Johns Hopkins tends to be featured in almost every arena in which that institution played a role even though its role was perhaps less important than that of certain other institutions.

Despite these criticisms the book contains a wealth of information, it is liberally illustrated, handsomely produced and is indeed a valuable reference. *Harris D. Riley, Jr., MD* □

BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate) ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

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The Editors and Staff
of The Journal and the
Oklahoma State Medical Association
extend to you and your loved ones
our best wishes for
A Joyous Holiday and
A Happy New Year.



It Pays To Belong!

This year the Oklahoma Utilization Review System (OURS) could save both taxpayers and patients over \$18 million . . . an accomplishment which has been heralded nationwide. A constant stream of inquiries has flowed through our office seeking information about this unique hospital utilization program since details about OURS were first released.

At the same time, the OSMA-sponsored, professional liability insurance program, which is being underwritten by the Hartford Insurance Company this year, promises to save Oklahoma physicians approximately \$1 million over the program which was offered by last year's carrier. The Hartford plan will save doctors in this state millions of dollars more over the programs which are available in any other state. To our knowledge, the OSMA-sponsored program is the best in the nation, and Dr C.



Alton Brown and his Council deserve our sincere appreciation for all their efforts which have resulted in tremendous savings for each of us.

Oklahoma physicians can rightfully be pleased with the excellent conditions under which we practice our profession. Our patients have demonstrated their confidence in our medical judgment, and we have confirmed our ability to treat them in a judicious and medically responsible manner. The result of this excellent physician-patient relationship is cost savings to both. By working together we have been able to save our patients hospital costs . . . and we have saved ourselves insurance premiums.

National trends indicate an increasing adversary relationship between patients and physicians, a condition which is disruptive to medical treatment and costly to both the physician and the patient. We in Oklahoma should be proud of our accomplishments in patient rapport, and we should commit ourselves to the continued practice of our profession to the summation of our education and training.

Ultimately, we all are benefactors!

*May the joys of this season be
real to each of you.*

C. S. Lewis Jr. M.D.

Clinical Assessment of Hyponatremia

ROBERT W. KING, JR., MD

Although there are many causes of hyponatremia, proper therapy can be based upon a few basic physiologic principles.

I) Introduction

Hyponatremia is a commonly encountered electrolyte disorder. It may result from disordered metabolism of water alone, salt alone, or water and salt together.¹ There are a large number of physiologic mechanisms which control the balance of salt and water within the body, and therefore a large number of different mechanisms which may ultimately result in hyponatremia. The diagnostic and therapeutic approach to a hyponatremic patient should be based on specific pathophysiology. These mechanisms are best approached through an understanding of the renal handling of sodium and water.

Although there are a variety of control mechanisms for sodium excretion in the kidney,

for the most part renal excretion of sodium is a reflection of effective blood volume (EBV).² If the EBV is low, the kidneys will tend to retain sodium and urinary excretion of sodium will be low. Thus, a patient with psychogenic polydipsia and an expanded EBV will tend to excrete large amounts of sodium in the urine. A patient with dehydration and a low EBV will tend to excrete small amounts of sodium in the urine. Patients with congestive heart failure or cirrhosis tend to have a low EBV, despite the fact that their total body fluid content is increased. These patients will also tend to excrete only small amounts of sodium in the urine because of their low EBV.

The renal excretion of sodium depends primarily upon the volume of the EBV, and not on the concentration of sodium in the blood. Conversely, the renal excretion of water depends primarily upon the concentration of sodium in the blood and not the volume of the blood space itself.³ In most situations, changes in osmolarity of the serum are the only factors which control release of antidiuretic hormone (ADH) by the pituitary gland, ultimately affecting renal water excretion.⁴ In states where the serum sodium, and therefore serum osmolarity, are low, release of ADH from the pituitary is suppressed. ADH levels fall in the blood. The collecting tubules become less permeable to water and a dilute urine is formed. When the

Table 1
Hyponatremia with Dehydration

Cause	EBV	Urine Na ⁺	Urine Osm	Other
GI losses: vomitting, NG suction	low	low (<20mEq/1)	high (>350)	low serum K ⁺ and Cl; high CO ₂
GI losses: diarrhea	low	low	high	low serum K ⁺ , high Cl; low CO ₂
Skin (perspiration, burns)	low	low	high	
Renal losses: Diuretics	low	high (>40mEq/1)	isotonic	low serum K ⁺ , high CO ₂
Renal losses: Addison disease	low	high	isotonic	high serum K ⁺ , low CO ₂
Renal losses: Salt-wasting nephritis	low	high	isotonic	

serum sodium concentration is elevated, ADH is released from the pituitary and the collecting tubules become permeable to water, resulting in retention of water and formation of a concentrated urine. This mechanism is functional as long as the EBV is fairly normal. However, when there is a significant decrease in EBV, ADH will be released by the pituitary gland regardless of the serum osmolarity.⁵ Therefore, a dilute urine would reflect an appropriate renal response in a patient with hyponatremia and a normal or elevated EBV. A concentrated urine would reflect an appropriate renal response in a patient with hyponatremia but a low EBV.

II) Diagnostic approach to the patient with hyponatremia

Hyponatremia may occur in the presence of dehydration, overhydration, or a normal state of hydration. The first step in evaluating a patient with hyponatremia should be to determine the state of hydration. By establishing the state of hydration, the number of diagnostic possibilities can be drastically limited, facilitating rapid diagnosis and specific therapy. Table 1 lists those disease states in which hyponatremia may develop in the presence of dehydration. For the most part, these diseases involve a loss of salt and water, with replacement of water but not salt. These losses may occur

through the gastrointestinal tract, the skin, or through the kidneys. A high urine sodium in the face of dehydration generally points to the kidneys as a source of loss, while a low urine sodium in the face of dehydration points to the gastrointestinal tract or skin as the source of loss. These diagnoses should be given primary consideration in any patient with hyponatremia who has orthostatic hypotension, poor skin turgor, elevated blood urea nitrogen, or other evidence of dehydration. With intestinal losses the urine osmolarity is usually greater than 400, while with renal losses the urine is usually isotonic with plasma. Other electrolyte determinations, including potassium, chloride, and carbon dioxide will usually help define the source of loss as well.

In patients who present with hyponatremia and peripheral edema or ascites, the diagnoses

Since his graduation from the University of Oklahoma College of Medicine in 1971, Robert W. King, Jr., MD, has been certified by the American Board of Internal Medicine and Nephrology. Dr King is Clinical Instructor at his school of graduation and Director of Continuing Medical Education at St Anthony Hospital in Oklahoma City. Among his medical affiliations are the American Society of Nephrology, the American College of Physicians and the Osler Society.

Table 2
Hyponatremia with Overhydration

Cause	EBV	Urine Na+	Urine Osm	Other
Congestive heart failure	low	low (<20 mEq/l)	high (350 mOsm/kg)	Edema
Cirrhosis	low	low	high	Edema Ascites Jaundice
Nephrotic syndrome	low	low	high	Proteinuria Hypoalbuminemia
Renal insufficiency	high	high (>40 mEq/l)	isotonic	High BUN High creatinine Edema

listed in Table 2 should be considered primarily. In the presence of congestive heart failure, cirrhosis, or nephrotic syndrome, the EBV is usually low, resulting in a low urine sodium, (less than 20 mEq/l) and a high urine osmolarity (greater than 300 milliosms/kg). Retention of salt and water in the presence of renal insufficiency results in an expanded EBV, associated with a high urine sodium and generally an isotonic urine.

Patients with hyponatremia often appear to be neither dehydrated nor overhydrated. In these patients determination of serum osmolarity is of great benefit. If the serum osmolarity is normal or high (greater than 280 milliosm/kg)

factitious hyponatremia is likely. This could be secondary to hyperglycemia, hyperproteinemia, or hyperlipemia. In patients with hyperglycemia, the increased serum osmolarity causes water to move from the cells into the extracellular fluid, resulting in dilutional hyponatremia. If the blood sugar increases by 100 mg/dl, the serum sodium will fall by 1.6 mEq/l.⁶ In patients with hyperproteinemia and hyperlipemia, the large molecules displace water, increasing the volume of serum. The amount of sodium and water in the serum do not change, however, and therefore the actual concentration of sodium in the serum will not change. Because the total volume of fluid is

Table 3
Hyponatremia with Normal Hydration

Cause	EBV	Urine Na+	Urine Osm	
Psychogenic polydypsia or Mellaril®	High	High (>40 mEq/l)	Low (<100 mOsm/kg)	
SIADH				
Myxedema	High	High	High (>100 mOsm/kg)	
Hypopituitarism				
Addison disease				
Diuretics				
Factitious:				
Hyperglycemia	Variable	Variable	250-500 mOsm/kg	Normal serum osmolarity Glucosuria
Factitious:				
Hyperproteinemia	Variable	Variable	Variable	Normal serum osmolarity
Factitious:				
Hyperlipemia	Variable	Variable	Variable	cloudy serum

Table 4
Causes of SIADH

- A) CNS-disorders
Meningitis, encephalitis, trauma, tumors, hemorrhage, hydrocephalus, abscess, Guillain-Barre syndrome
- B) Pulmonary disease
Pneumonia, cavitary lesions, tumors, positive pressure ventilation
- C) Tumors
Lung, pancreas, duodenum, thymoma, ureter, lymphoma
- D) Acute intermittent porphyria
- E) Drugs
Vincristine, cyclophosphamide, oxytocin, clofibrate, chlorpropamide
- F) Idiopathic

increased by the presence of proteins or lipids, the measured sodium concentration will decrease.

If the serum osmolarity is low (less than 280 milliosm/kg) the urine osmolarity becomes helpful. If the urine osmolarity is less than 100 milliosm/kg in the presence of a low serum sodium, this represents an appropriate response to expanded EBV, making psychogenic polydypsia the most likely diagnosis. This same pattern has been observed in patients taking thioridazine (Mellaril®), presumably due either to the dry mouth produced by the drug or to a hypothalamic effect on the third center.⁷ If, on the other hand, the urine osmolarity is greater than 100 milliosm/kg, this represents an inappropriate response to the low serum osmolarity.

Figure 1

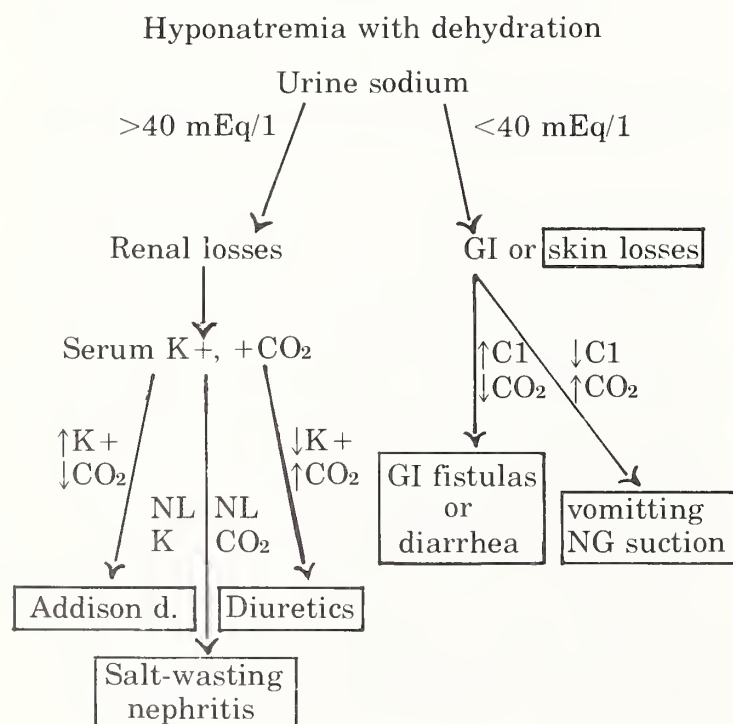
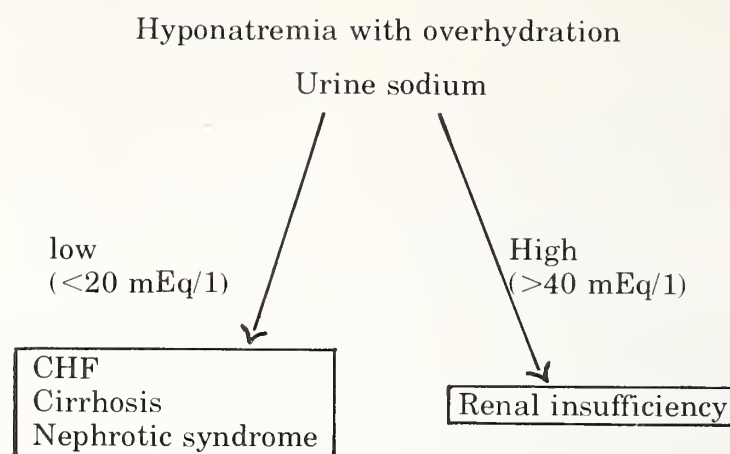


Figure 2



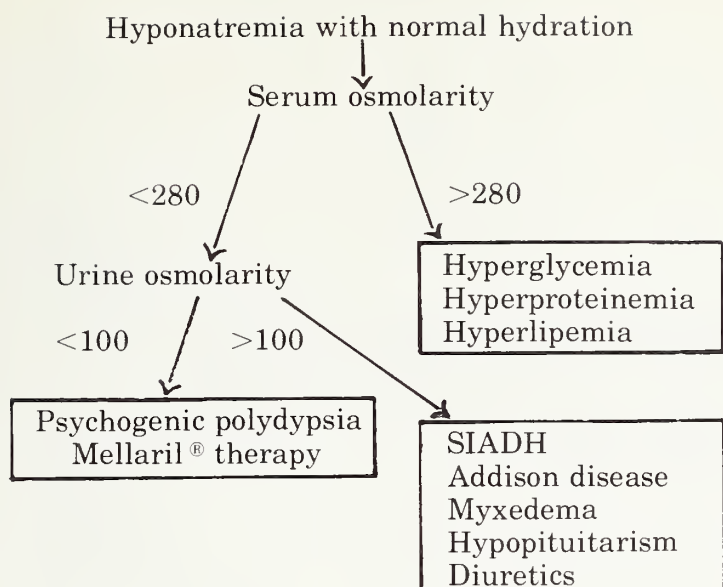
In this situation, the syndrome of inappropriate ADH (SIADH) should be considered. The causes of SIADH are listed in Table 4. There are several other entities which cannot be distinguished from SIADH on a clinical basis. These include Addison's disease, myxedema, hypopituitarism, and use of diuretic medications. All of these entities should be excluded before a diagnosis of SIADH can be established.⁸ In addition, one must be sure that the patient does not have a low EBV causing release of ADH and concentration of the urine.

Figures 1 through 3 demonstrate an outline for approaching the patient with hyponatremia, dependent upon the state of the patient's hydration. In most cases, an accurate diagnosis can be established by this method using a minimum amount of laboratory work. In some cases, a definite diagnosis may not be established, but definition of the EBV, urine sodium, and urine osmolarity will give enough information to indicate appropriate therapy.

III) Management of hyponatremia

For those patients with dehydration, salt is appropriate therapy. This can be given either in the form of salt tablets or intravenous saline, depending on the severity of the situation. Other therapy is directed at eliminating the initial cause of the hyponatremia. This may entail correction of intestinal losses, cessation of diuretic therapy or administration of steroids to the patient with Addison disease. In the patient who is overhydrated restriction of water becomes more important. In these patients administration of salt is dangerous since they already have an expanded total body volume and a decreased renal ability to excrete sodium. Diuretics may be used, but water restriction should be instituted at the same time to prevent

Figure 3



further hyponatremia. In patients with severe overhydration, the use of demeclocycline to inhibit renal reabsorption of water may be beneficial.⁹⁻¹¹ In patients with psychogenic polydypsia restriction of fluid intake will correct the problem. If patients have been taking Mellaril,[®] cessation of this drug will also be beneficial. In patients who are taking thiazide diuretics and develop hyponatremia without significant dehydration, therapy with potassium chloride in addition to sodium chloride is the treatment of choice.¹² The potassium chloride will move into the cells, displacing sodium which returns to the extracellular fluid and raises the serum sodium to normal. In patients with SIADH restriction of fluid is the mainstay of therapy. In this situation reduction of fluid intake will ultimately result in a drop in EBV and renal excretion of sodium will diminish. The administration of sodium to a patient with SIADH in the presence of an expanded EBV will only result in increased renal excretion of sodium and will not improve the hyponatremia. In some patients with SIADH, removal of the precipitating cause may lead to complete correction of the syndrome. In those

patients in whom the cause cannot be removed, administration of lithium or demeclocycline may be used to induce a partial nephrogenic diabetes insipidus.¹⁰ By doing this, the effect of the circulating ADH is blocked at the level of the kidney and patients become able to excrete water. These patients must be watched closely for dehydration because of the partial nephrogenic diabetes insipidus. However, for the most part, it is easier to manage these patients in this way than by trying to severely limit fluid intake, especially on an outpatient basis.

IV) Summary

The causes of hyponatremia are many. In most cases definition of the state of hydration is of great benefit in limiting the differential diagnosis and deciding upon appropriate therapy. The use of serum osmolarity, urine sodium, and urine osmolarity are usually all that is necessary to define the exact cause of the hyponatremia so that appropriate therapy may be instituted.

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Travelers' Diarrhea in Mexico— A Review

GARY D. CONRAD, MD

Many myths shroud the understanding of this common malady. However, with recent advances, this "unknown" is rapidly becoming a well-defined area of clinical knowledge.

INTRODUCTION

Travelers' diarrhea is a disease which continues to be of major importance because of the frequency of tourism into Mexico from the United States. It often affects American travelers within the first ten days of arrival, usually within the first week,¹ and has an attack rate of 24-50%.²⁻⁴ In a prospective study⁵ the onset of illness in all participants with travelers' diarrhea occurred three to sixteen days after arrival in Mexico, with a median of six days and a mean of 6.5 days. It can be mild, but can be severe and incapacitating. This syndrome usually lasts one to five days, and is self-limited; in severe cases, it can last a week or more.¹ The diarrhea is often watery, and is frequently accompanied by additional symptoms, including abdominal cramps, malaise, nausea, anorexia, feverish feeling and others. (Table I). It is interesting to note that

generally there is a greater incidence of associated symptoms with enterotoxigenic *E. coli* diarrhea as compared with diarrhea of unknown cause. The frequency of stools is sometimes up to 10-20/24 hours, and undoubtedly more in especially severe cases.

ETIOLOGY

Many causes for travelers' diarrhea have been proposed in the past, including changes of climate, effects of travel upon circadian rhythm, the psychological stress of travel, ingestion of cold drinks or spicy foods and even cold drafts.¹ In the more recent literature, however, there is increasing evidence for infectious causes, especially *E. coli*. A study by Gorbach *et al* suggested that 70% of travelers' diarrhea in Mexico is associated with heat-labile, enterotoxigenic *E. coli*.⁴ Merson *et al* demonstrated infectious causes in 63% of patients with travelers' diarrhea, with enterotoxigenic *E. coli* alone or with another pathogen accounting for illness in 45%.⁵ Other infectious causes found by Merson included salmonella, shigella, invasive *E. coli*, *V. parahaemolyticus*, *G. lamblia*, and Rheovirus-like agent. No pathogen was found in 37%, but it was felt that this could be attributed in part to failure to obtain a fecal specimen from some participants early in their illness, and, in a few participants, antibiotics were taken before specimen collection. Echo and Coxsackie viruses, adenoviruses, and the parvovirus-like agent were not found in any participants, though obviously this study could not exclude them as possible etiologic agents in other cases.

Table I. Frequency of Symptoms of Travelers' Diarrhea

Symptoms	All Cases (59)	Frequency (%) Illness Due to Enterotoxi- genic <i>E. coli</i> only (19)	Illness of Unknown Cause (19)
Diarrhea	100	100	100
Maximum frequency (stools/24 hours):			
1-2	13	5	24
3-5	67	63	64
6-15	20	32	12
Abdominal cramps	73	74	63
Malaise	58	74	37
Nausea	46	58	26
Anorexia	46	58	21
Feverish feeling	37	37	21
Documented fever	7	11	5
Chills	29	26	11
Headache	29	37	11
Tenesmus	29	21	16
Myalgia	25	26	16
Prostration	12	21	5
Vomiting	8	11	11
Diarrhea alone	15	5	26

Figures in parentheses denote no. of participants From⁵

PATHOGENESIS

E. coli can cause disease by two mechanisms. One involves the elaboration of an enterotoxin that acts on the small bowel in a manner similar to *Vibrio cholera* enterotoxin. The second mechanism is an invasive process whereby *E. coli* organisms invade the large bowel epithelium, as in shigellosis. Enterotoxin production is determined by a transferable plasmid. *E. coli* appears to produce two types of toxin, heat-labile (LT) and heat-stable (ST).¹ In Merson's study⁵ three types of enterotoxigenic *E. coli* were isolated, those producing only ST, those producing only LT, and those producing both ST and LT. (*Editor's Comment:* There should be a section pointing out that: (1) the enterotoxigenic *E. coli* are not the same as pathogenic *E. coli*, and (2) routine culture methods will not identify enterotoxigenic *E. coli* — in fact they cannot be identified by methods available in most clinical laboratories.) The pathogenic mechanisms of other organisms involved in travelers' diarrhea will not be discussed here.

EPIDEMIOLOGY-IMMUNITY

It has frequently been stated that to avoid

travelers' diarrhea one should not drink the water while visiting our southern neighbor. However, in Merson's study,⁵ illness was not associated with consumption of water or iced beverages. (Table II) Those who reported drinking only commercially bottled water did not have a significantly different attack rate from those who reported drinking tap water or restaurant or hotel water. There was a statistically significant association between consumption of salads containing raw vegetables and infection with enterotoxigenic *E. coli*. Incidentally, occurrence of the illness in one spouse did not seem to increase the risk of illness in the other.⁵

At an international congress in Mexico a study by Loewenstein *et al* demonstrated that the attack rate varied significantly according to the home country of the visitor.³ It was found that: (1) Citizens of the United States and Canada have the highest attack rate, being 55%. (2) Participants from northern Europe, including Germany, Britain, Belgium, Netherlands, and Scandinavia, had an attack rate of 48%. (3) Those from Latin America, Italy, Spain/Portugal, Africa, and the far East, had a lower attack rate of 18%. From this data it was hypothesized that the world could be divided into "diarrheal" areas and "non-diarrheal" areas, implying that an immunity of sorts might be developed. DuPont *et al* in a comparative susceptibility study⁷ of Latin American and United States students to enteric pathogens, found that enterotoxigenic *E. coli* was not an important cause of diarrhea among Latin American students, but was a particularly significant problem for newly-arrived United States students. Enterotoxigenic *E. coli*, however, in comparison with newly arrived United States students, was less commonly associated with diarrhea among US students who had remained in Mexico for a year or longer. These studies indicate that immunity in enterotoxigenic *E. coli* infection occurs after repeated or chronic exposure. DuPont suggests that the immunity might be to the toxin or to surface antigens that are important in the attachment of enterotoxigenic bacteria to the epithelial lin-

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Table II. Association of Illness with Water and Ice Consumption

Status	Total Participants	Ill Participants	% Ill Participants
Drank water	96	53	55
Drank no water	11	6	55
Drank only commercially bottled water	23	13	57
Frequently drank tap water	11	3	27
Frequently drank other restaurant or hotel water	18	9	50
Drank beverages with ice	87	50	57
Drank no beverages with ice	20	9	45

From⁵

ing of the gut. This attachment is, in itself, a prerequisite for disease.⁸

TREATMENT

Because travelers' diarrhea is a self-limited disease, treatment is generally symptomatic, and consists chiefly of fluid replacement and rest. One should be alert for the presence of blood or mucous in the stool, which could indicate that invasive organisms such as *E. coli* or shigella are involved. In such cases, stool cultures should be done at least for *Shigella* and other identifiable pathogens. Cultures are important because of the increasing resistance of enteric organisms to many antibiotics, especially ampicillin and tetracycline.

A recent study by Ericsson *et al* has found that Pepto-Bismol is an effective medicine in the treatment of travelers' diarrhea.⁹ It is noted that a marked decrease in the number of stools occurred four to twenty-four hours after taking Pepto-Bismol, and patients also reported less nausea, diarrhea, and abdominal cramps within 24 hours after beginning therapy, which consisted of taking 30 cc of Pepto-Bismol every half-hour for four hours. According to Ericsson, this delayed action probably indicates that some toxin has already acted at the intestinal surface, and that Pepto-Bismol appears to modify toxin that is subsequently produced. The active ingredient of Pepto-Bismol is bismuth subsalicylate, yet neither this ingredient nor its vehicle separately are as effective as the combined product.¹⁰

A very popular drug used for treatment of travelers' diarrhea is diphenoxylate hydro-

chloride with atropine (Lomotil), which inhibits the motility of the gastrointestinal tract, and does diminish diarrhea and abdominal cramps. DuPont and Hornick, in their study of the effect of Lomotil on the course of shigellosis, discovered that fever and toxemia persisted two-to-three times longer in febrile patients who received Lomotil alone when compared to other treatment groups.¹¹ Other previous studies^{12, 13} have shown that it is the rapid motility pattern of the small bowel more than any other factor that explains the paucity of bacteria at that level, and in enteric infection caused by invasive bacteria it appears that the time of contact between the pathogen and intestinal mucosa may be important. DuPont and Hornick state:

In the early part of the 20th century, it was common practice to give ipecac, cathartics (such as castor oil), and colonic irrigation to patients with infectious diarrhea. Each of these was designed to rid the intestine of the offending pathogen. Such remedies probably were of no benefit to the patient, yet these early practitioners may have correctly viewed diarrhea as a mechanism whereby the body rid itself of pathogenic microbes. With the wide-spread availability of potent pharmacologic agents we should exercise care not to administer a drug that might counteract normal body defenses. In the case of infectious diseases, cough, vomiting, and diarrhea may represent protective mechanisms, and interference with this may not always be wise.

In light of the fact that travelers' diarrhea may be caused by invasive organisms such as shigella and invasive *E. coli* without indicative clinical signs such as blood and/or mucous in the stools, it is highly questionable whether Lomotil and other peristaltic inhibitors should be used in its treatment. There are no current studies available which assess the efficacy of Lomotil in the treatment of enterotoxigenic *E. coli* diarrhea, but, in view of the above, it would seem unlikely that the use of Lomotil is indicated even in the face of proven enterotoxigenic *E. coli* diarrhea.

PREVENTION

Travelers' diarrhea can be best prevented by identification of the potential vehicles of transmission. The study by Merson⁵ suggests that food is responsible for some illness caused by enterotoxigenic *E. coli* and salmonella. Since various enteric pathogens and vehicles seem to be responsible for travelers' diarrhea

in Mexico, one of the best protective measures is eating only cooked foods that have been recently prepared and held at proper food-storage temperatures. Although no evidence was found that water or ice is a vehicle of transmission, as a general precaution tap water and ice should be avoided or purified where water is inadequately treated.

ANTIBIOTIC PROPHYLAXIS

The role of antibiotics in the prophylaxis of travelers' diarrhea is still controversial. Kean *et al* in a double-blind study tested the efficacy of neomycin and phthalylsulfathiazole in the prevention of travelers' diarrhea among 473 American college students in Mexico City.¹³ Diarrhea occurred in 23.8% of those who took a placebo, 16.1% of those who took neomycin, and in 11.9% of those who took phthalylsulfathiazole, with the latter being statistically significant. Moderate and severe diarrhea occurred in 17.3% of those who took a placebo, 5.1% of those who took neomycin, and in 6.6% of those who took phthalylsulfathiazole. These results are statistically significant. Turner compared the prophylaxis and efficacy of neomycin-sulfonamides (each tablet containing neomycin sulfate, sulfadiazine, sulfadimidine, sulfathiazole) and Streptotriad (streptomycin sulfate, sulfadimidine, sulfadiazine, sulfathiazole).¹⁴ It was found that Streptotriad was significantly beneficial in reducing both diarrhea and associated symptoms. Neomycin-sulfonamides were significantly beneficial in reducing associated symptoms, but not diarrhea. It is generally agreed that one of the prophylactics popular in the past, iodochlorhydroxyquin (Entero-Vioform), is no more effective than a placebo. In fact, the use of this drug in high doses for extended periods of time has been linked to subacute myelo-optic neuropathy, a serious neurological disease. There is a possibility that ampicillin or tetracycline, to which most of the enterotoxigenic *E. coli* isolated by Merson⁵ were sensitive, has a place in prophylaxis. At present there are no studies to verify this, and there is the distinct possibility that either of these agents may, in themselves, cause their own special form of "travelers' diarrhea." It appears that phthalylsulfathiazole or Streptotriad might, at the present time be considered to be the drugs of choice for prophylaxis. Phthalylsulfathiazole is available as Sulfathalidine.

SUMMARY

Travelers' diarrhea is a syndrome which affects a high percentage of visitors in Mexico, and is associated with a variety of etiologic agents, the predominant one being enterotoxigenic *E. coli*. There is no correlation between water consumption and the attack rate, though visitors from the United States, Canada, and northern Europe have an increased incidence as compared to travelers from other areas. Treatment is generally symptomatic, though the use of peristaltic inhibitors is generally contraindicated. Pepto-Bismol has been found to be effective. Prophylaxis with Streptotriad or Sulfathalidine does seem to be of benefit, and should be prescribed as a preventive measure as well as a palliative one. Unfortunately, there seem to be no certain measures in the prevention of travelers' diarrhea at the present time, and undoubtedly it will continue to be a nuisance to many who venture into Mexico until more effective means of prophylaxis are discovered.

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A Discussion of the Rights of the Oklahoma Physician As an Expert Witness

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Is the knowledge and experience of physicians freed on demand by any individual involved in litigation? Can any plaintiff or defendant 'fetch a doctor' prn?

It has been reported¹ that 85% of cases heard in the courts have medical implications. Additionally, the number of cases on both the criminal and civil dockets are constantly increasing. As a consequence of these and other factors, physicians are being called to serve as medical expert witnesses in courts of law with increasing frequency. Occasionally the physician called is a specialist in legal medicine and therefore prepared for the task. More often, however, the physician called is primarily a clinician who may not be familiar with his rights and duties as a medical expert witness. To further complicate the matter for the Oklahoma physician,

Oklahoma is unique among the fifty states in that there are no Oklahoma statutes which specifically address the issue of the expert witness and there are no judicial decisions in an Oklahoma appeals court which entertain the issue. A description of the role of the expert witness will be given; the position of medical expertise in the law will be presented; the judicial definition of property will be stated; the basic rights of the physician under the United States Constitution will be expressed; the various methods by which other states have dealt with the property rights of the medical expert witness will be examined; and the alternatives available to the Oklahoma physician called to be a medical expert witness will be viewed.

Witnesses in courts of law usually serve as a fact witness or as an expert witness. A witness of fact generally is not permitted to express an opinion nor is he allowed to speculate. He is restricted to providing direct answers to questions asked of him by trial attorneys about disputed factual matters. The role of an expert witness may be differentiated from that of a witness of fact in two ways. The first is that an individual must be qualified by demonstration of a special knowledge in order to be accepted as an expert. The second is that in delivering his testimony the expert may do one or more of the following: (a) come to conclusions; (b) express

professional opinions based upon review of facts; (c) provide responses to hypothetical questions; or (d) explain technical procedures to the judge or jury.

Since the testimony of a medical expert witness is based upon lengthy education, special training, and clinical experience, the testimony is an expression of his expertise, and this expertise has all of the hallmarks of property. "Property" has been defined to include every interest anyone may have in any and everything that is the subject of ownership by man, together with the right to freely possess, use, enjoy, or dispose of same . . .² The New Jersey Supreme Court further clarified that expertise was the private property of the expert in ruling, "When the experience, training and skill acquired by years of study and practice in a given profession or calling exists, such knowledge and skill are not the property of litigants."³ This principle was even more concisely expressed by the Pennsylvania Supreme Court when it stated, "The private litigant has no more right to compel a citizen to give up the product of his brain than he has to compel the giving up of material things."⁴ Since medical expertise is equivalent to property, to compel that a physician convey this expertise by testifying as an expert medical witness without reasonable compensation would be a clear violation of his rights as secured under the 14th Amendment to the United States Constitution. This amendment prohibits depriving an individual of his property without due process of law. Even if compensation were to be offered, the physician could refuse to testify if he considered the amount inadequate for the task or he could simply choose not to work under the circumstances. He would have Constitutional support for this latter position in the 13th Amendment which prohibits involuntary servitude.

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Three different methods have been used by other states to guarantee that the medical expert witness will be fairly compensated. In Idaho, The State Bar Association, the Trial Lawyers Association, and the State Medical Association mutually designed and adopted a document entitled "Statement of Principles Governing Certain Physician/Lawyer Relationships."⁵ which insures a fair compensation for the medical expert witness. A second method is for the state legislatures to enact appropriate legislation which insures that the physician will receive compensation for testifying as an expert witness. Model legislation of this type has been enacted in California⁶ and Maine.⁷ The third method, which requires a test case originating in a trial court, is for the state supreme court to affirm the absolute right of an expert witness to be fairly compensated. Favorable state supreme court rulings have been written by the following states: Colorado,⁸ Florida,⁹ Illinois,¹⁰ Indiana,¹¹ Iowa,¹² Kansas,¹³ New Jersey,¹⁴ New York,¹⁵ Pennsylvania,¹⁶ and Rhode Island.¹⁷ In assessing the cumulative impact of the actions of the thirteen states, it is of significance that among these thirteen one finds the most populous state, the smallest state, states with a large urban population, states with a large rural population, and geographically, the westernmost, the northernmost, the easternmost, and the southernmost states of the continental United States. These observations suggest that the concept that medical expertise is the private property of the physician is widely held throughout the United States.

Should an Oklahoma physician be called as a fact witness and in court finds himself being utilized as an expert witness without an offer of appropriate compensation, he could appear in the court, discharge any obligations which he might have as a fact witness, and then respectfully refuse to testify as a medical expert witness. In the event that the presiding judge of the trial court were to hold him in civil contempt of court and order him incarcerated, the physician could obtain immediate release from confinement with a writ of habeas corpus which must be granted. The physician would have then established a test case which would move to a higher court for determination unless the trial judge, after considering the matter, withdrew the contempt citation. In reviewing the issue, the higher court would be strongly influenced by the previous decisions of the other state sup-

reme courts which have addressed this same issue. The Oklahoma appeals court could render a decision in favor of the physician based upon these previous rulings. However, this higher court would be obligated to render a decision which was consistent with the 13th and 14th Amendments to the United States Constitution. In either event, the civil contempt citation of the trial court would be voided, and the physician would be a free agent to negotiate whether or not he would serve as an expert witness and if so, under what circumstances. □

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Tuberculosis in Oklahoma

Care of the tuberculosis patient has changed greatly over the years. Throughout the United States tuberculosis management, more and more, is provided by the private physician. In Oklahoma the majority of tuberculosis patients are followed through the facilities of the local county health department. Even the patient of the private physician is frequently referred to the health department for tuberculosis medications and monthly evaluations for possible side effects.

The Oklahoma State Department of Health through the county health department provides these antituberculosis medications free. In addition, they interview the new case for contacts and examine those persons named to determine if they have been infected. When a person is shown to be a reactor they are referred for further medical evaluations which is available through the health department.

Should a tuberculosis patient need to be hospitalized arrangements can be made to provide this service by calling the medical consultant in the Tuberculosis & Respiratory Disease Division at the Oklahoma State Department of



News From The Oklahoma State Department of Health

Health in Oklahoma City, (405) 271-4063. The medical consultant is also available for consultation about other aspects of tuberculosis management.

There have been 244 new cases reported in Oklahoma as of October 1, 1977, and this compares with 274 cases for the same period of time in 1976, reflecting a downward morbidity for the first time in several years. This morbidity is based upon the new classification of disease as introduced by the American Thoracic Society in 1975. Of the patients being treated for tuberculosis in Oklahoma during the period since January 1, 1977, 20 have required hospitalization for their tuberculosis and five have required nursing home care under the state plan providing payment for services. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR SEPTEMBER, 1977

DISEASE	September 1977	September 1976	August 1977	Total To Date	
				1977	1976
Amebiasis	3	3	—	18	11
Brucellosis	—	—	1	3	7
Chickenpox	11	13	3	927	1587
Encephalitis, Infectious	—	1	1	12	15
Gonorrhea (Use Form ODH-228)	1167	1287	1222	9682	10042
Hepatitis, A, B, Unspecified	52	61	47	577	1038
Leptospirosis	—	—	—	—	1
Malaria	—	—	—	—	2
Meningococcal Infections	—	1	—	11	20
Meningitis, Aseptic	9	—	7	41	18
Mumps	14	18	13	492	700
Rabies in Animals	15	20	8	204	124
Rheumatic Fever	—	—	—	2	12
Rocky Mountain Spotted Fever	5	7	9	71	88
Rubella	2	7	—	31	67
Rubella, Congenital Syndrome	—	—	—	—	—
Rubeola	3	2	1	59	291
Salmonellosis	49	32	34	221	200
Shigellosis	17	11	6	52	163
Syphilis, Infectious (Use Form ODH-228)	8	7	7	65	84
Tetanus	—	—	—	—	—
Tuberculosis, New Active	24	34	20	239	282
Tularemia	2	—	1	10	7
Typhoid Fever	—	—	—	1	1
Whooping Cough	3	1	2	9	19

"OURS" Project Approved As PSRO Plan

The Oklahoma Utilization Review System project has been approved as the basis for Oklahoma's Professional Standards Review Organization plan.

Known as OURS, the project is a special 12-month demonstration program to examine the reliability of retrospective review of a hospital's performance in place of concurrent case-by-case review. A preliminary report of the first six months operation of the OURS plan indicates that such an approach is not only workable, but less expensive and disruptive of a hospital's staff.

Peer review foundation staff members, at the direction of the Board of Directors, utilized the OURS project as the central "review" portion of the PSRO plan for Oklahoma. The acronym "OURS" will be dropped under the PSRO plan, and the program will simply be a hospital utilization monitoring plan. The monitoring plan is unique in that it creates a retrospective statistical audit mechanism to evaluate a hospital's total performance. The performance is then compared to standards or criteria for measurement and evaluation of a hospital's internal utilization. At the present time no other operational PSRO has such a capability.

The Foundation's Board of Directors met on October 23 and officially approved the final draft of Oklahoma's PSRO plan and instructed the Foundation staff to forward the plan to HEW for consideration. If the plan is approved by HEW, the Oklahoma Foundation will be designated a conditional PSRO and will begin to conduct PSRO activities in Oklahoma's hospitals.

The hospital utilization monitoring program is the primary difference between Oklahoma's approach to PSRO and the model PSRO being promulgated by HEW. Under the model PSRO the determination of whether or not a given

hospital is actually conducting a review, and the quality of that review, is based on the collection of the PSRO Hospital Discharge Data Set, known as PHDDS. Under the model program the PHDDS information is sent directly from the hospital to the local PSRO where it is computerized, evaluated, and then forwarded to HEW in a computer tape form.

For a standard PSRO, operating under the model plan, the PHDDS is the only source of information about a hospital's PSRO activities. The Oklahoma plan utilizes all of the data on a hospital's claim form for each Medicare and Medicaid admissions and discharge.

In the past, one of the most severe criticisms leveled against the PSRO program nationwide was that it called for the creation of a separate and duplicative computer processing system to collect and analyze PHDDS data, while ignoring the already existing system to collect and process Medicare and Medicaid claims. The Oklahoma PSRO plan eliminates the need for this separate processing system by relying on the claims data itself.

If the Oklahoma PSRO plan is approved and funded by HEW, hospitals and physicians will note very little change from the current OURS plan operation. Under the HEW PSRO model, at the beginning of the PSRO operation all hospitals are required to review, on a case-by-case basis, each and every Medicare and Medicaid admission. Oklahoma's PSRO will begin operation by utilizing a focused review mechanism based on the automatic certification allowed by the OURS plan. This should reduce the two highest cost components in an individual hospital's PSRO compliance: utilization review coordinator time and activities and the time and cost of the physician advisor and Utilization Review Committee. Oklahoma's Congressional Delegation has

been asked to intercede on the part of the Foundation to encourage HEW to accept and fund the PSRO plan as proposed. A preliminary evaluation of the first six months operation of the OURS plan would indicate that HEW would be hard-pressed to say that it was not a success and, subsequently, should not be used as the basis for a PSRO.

A comparison of Oklahoma hospital performance during the last six calendar months of 1976, referred to as the baseline period, to the first six months of operation of the OURS plan, February through July, 1977, indicates the following:

The total number of Medicare and Medicaid claims filed dropped from 89,735 in the baseline period to 82,562 during the operational period. This was a decrease of nearly eight percent.

The number of hospital days actually utilized dropped from 779,214 to 754,369 during the operational period. A decrease of just over three percent.

The number of claims totally denied by the Medicare fiscal intermediary, Oklahoma Blue Cross, decreased from 1,042 to 699 during the first six months operation of OURS. Down by more than twenty-six percent.

The number of claims per thousand possible beneficiaries dropped from 170 during the baseline period to 155. At the same time the number of hospital days utilized per thousand possible beneficiaries decreased from 1,476 to 1,015, down 60 days per thousand or four percent decrease.

By using the various figures generated through the OURS plan, it's possible to conclude that during its first six months of operation the program resulted in the savings by non-utilization of nearly \$9 million to Oklahoma's Medicare and Medicaid programs.

	BEFORE OURS PLAN 7/1/76 — 12/31/76	AFTER OURS PLAN 2/1/77-8/1/77	% CHANGE
Medicare & Medicaid Claims Filed	89,735	82,562	-8%
Hospital Days Utilized	779,214	754,369	-3%
Medicare Claims Denied	1,042	699	-26%
Estimated Savings During First Six Months of Operation — \$9 million			

Evaluation of the first six months operation of the OURS plan has encouraged the Foundation and the OSMA to tell its "success story"

nationwide. All members of the Oklahoma Congressional Delegation have been kept constantly informed about the progress of the OURS plan, and now the progress of the PSRO plan.

The OURS plan has been mentioned in several national publications, including the *American Medical News*, the *Journal of the American College of Physicians*, and *PSRO Update*.

Foundation Executive Director Ed Kelsay was invited to be a guest speaker at the Annual Meeting of the National Association of Review Coordinators in late September. In October OSMA President C. S. Lewis, Jr., MD, OSMA Executive Director David Bickham, and Kelsay presented a program on the OURS plan to the Governor's Meeting of the American College of Physicians in Kansas City.

AMA's PSRO Council is also interested in the plan and received a special report from the Foundation's executive director in Chicago in mid-October.

Kelsay told both the AMA's PSRO Council and the National Review Coordinators Meeting that, "The important thing is not whether the OURS plan can actually function as a PSRO. The important thing is the fact that HEW has now indicated its willingness to deviate from the model plan and allow alternative approaches to PSRO. In the past their strict adherence to the model plan stifled any attempt at experimentation. The approval of Oklahoma's PSRO plan as submitted will allow a major deviation from the model, and will establish a precedent for alternative approaches."

Immediately after the PSRO plan is approved and Oklahoma is designated a Conditional PSRO, it will be necessary for the Foundation to enter agreements with each hospital in the state, the Medicare fiscal intermediaries, and the state Medicaid agency for exchange and interchange of information. This will then be followed by a series of training programs conducted throughout the state to familiarize hospital personnel and physician staff members with the Oklahoma PSRO plan requirements.

The Foundation has officially requested an extension of the OURS plan in order to prevent a gap from occurring between the end of the formal OURS plan and the beginning of PSRO operations in Oklahoma.

The original OURS contract called for a

12-month demonstration project to end on January 30, 1978. The Foundation has requested a minimum three-month extension to carry the OURS plan through the end of April, which should allow enough time for the Foundation to receive its designation as a Conditional PSRO, employ the appropriate staff members, train the necessary personnel in the hospitals, and begin PSRO operations. □

Malpractice Update— New Insurance Program Approved

Editor's Note: Two years ago your state medical association reported to you that the professional liability situation in Oklahoma and throughout the country had reached crisis proportions. Professional liability insurance had become unavailable in some states, and the price made it untenable in others. Even in Oklahoma, where the situation had historically been good, Oklahoma physicians were faced with what approached a 100 per cent increase in premiums. The number of companies writing this type of insurance had dropped from over 30 to only a handful.

Last year, because of some last-minute negotiations, the association was able to secure insurance coverage up to \$2 million, but it wasn't easy. The basic layer was secured through one company, the first million dollar layer through another, and the second million dollar layer through yet another. In order to secure insurance coverage, the Oklahoma State Medical Association was forced to take an unique approach to providing the first \$1 million layer and was forced to offer high-priced insurance in order to provide the second million dollar layer.

During the last few years the OSMA Insurance Committee has spent countless hours in negotiating the various insurance proposals, in underwriting the program, and in reviewing precise claims-losses-reserves information regarding the OSMA-sponsored professional liability insurance program. As a result, this year the OSMA found itself in the unique position of having two strong and stable companies bidding for the insurance program in this state . . . a situation unheard of in recent years. After days and weeks of review and negotiating, the insurance committee has now voted to move the OSMA-sponsored professional liability in-

surance program from the Insurance Company of North America to the Hartford Insurance Company. The following question and answer series is designed to explain the insurance program as it will be administered under the Hartford Company and to further explain how and why this change came about.

Q. What are the basic differences and similarities in the Hartford program and the insurance program we were enrolled in last year?

A. There are probably more similarities in the two programs than differences, although the differences are very important. First of all, the differences: 1) First and foremost, the Hartford Company will write insurance coverage for physicians up to \$5 million. This provides physicians wanting it an extra \$3 million in protection above that which was available last year. It also offers excess limits coverage, which is much more reasonably priced than the \$2 million layer which was available in 1977 through Glacier General. A more subtle but important difference is the fact that the Hartford proposal returned the OSMA program to a more traditional type of coverage. The \$3.25 million aggregate sum provided last year by Lloyd's of London will be done away with in favor of a straight insurance package. 2) Another important difference is the deletion of the 20-25 per cent surcharge which INA assessed against partnerships and corporations in Oklahoma. It is estimated that approximately 50 per cent of the physicians in Oklahoma are involved in either partnerships or corporations, so this should result in a savings of several hundred thousand dollars to OSMA members. 3) Gone also is the clause which forces physicians to purchase the umbrella portion of this program (premises liability, homeowners, etc.). The Hartford insurance is *strictly and solely* professional liability insurance.

There are also some very important similarities between the Hartford program and the program which has been sponsored by the OSMA for the last few years. They are as follows: 1) The Hartford will provide occurrence type insurance. This means that all enrolled physicians will be covered for any claims brought against physicians for acts occurring in 1978. The OSMA feels this is much better insurance than the claims-made type which offers coverage only for those events for which claims are actually filed in 1978. 2) The Hart-

(Continued on Page 546)

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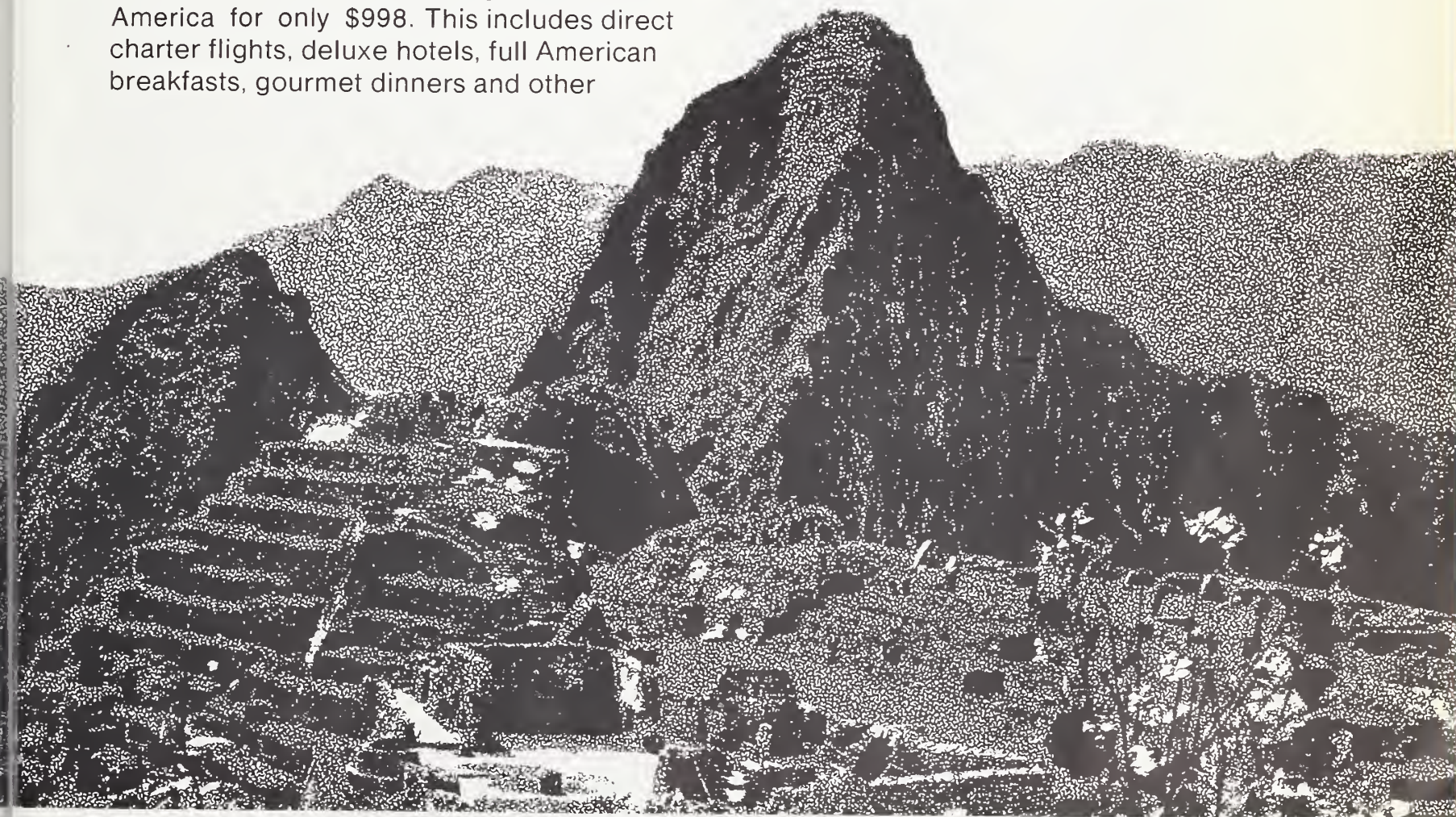
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ford has agreed to retain the same defense counselors. These attorneys have a remarkable won-loss record over the last few years and undoubtedly have contributed much to the good program in Oklahoma. 3) The OSMA Insurance Committee will continue to work very closely with the insurance company in underwriting this program. 4) The OSMA will continue to receive precise claims-losses-reserves information from the Hartford just as it did from the Insurance Company of North America. This information has enabled the OSMA to know exactly what the professional liability situation is in Oklahoma and has played an important role in keeping Oklahoma rates among the lowest in the country.

Q. What about the rates?

A. For the first time in several years we are able to report that most physicians will pay only a small increase for their insurance next year and for some physicians insurance coverage will be substantially lower. The tables shown below indicate the following: Table A—Hartford Premiums by Risk Class; Table B—1977 Premiums.

TABLE A

Class	\$100,000/ \$300,000	\$1 million/ 1 million	\$2 million/ 2 million	\$3 million/ 3 million	\$5 million/ 5 million
I	\$ 382	\$ 630	\$ 764	\$ 852	\$ 947
II	\$ 677	\$1117	\$1354	\$1510	\$1679
III	\$1337	\$2206	\$2674	\$2982	\$3316
IV	\$1781	\$2939	\$3662	\$3972	\$4416
V	\$2226	\$3673	\$4452	\$4964	\$5520

TABLE B

Class	1977 Premium	\$1 million*	\$2 million**
I	\$ 347	\$ 675	\$1722
II	\$ 615	\$1196	\$3048
III	\$1215	\$2363	\$5528
IV	\$1619	\$3149	\$8174
V	\$2024	\$3937	\$11,542

*Includes INA program, added to the Lloyd's of London program.

**Includes INA program, Lloyd's of London program, and the Glacier General program.

Q. Won't the absence of partnership and corporation insurance leave doctors wide open to these types of lawsuits?

A. On only very rare occasions have settlements or judgments been brought against physician partnerships or corporations. It is almost always possible to have the partnerships and corporations dropped from the lawsuit if they are originally named in it. However, in the event the insurance coverage is necessary, the Hartford program covers partnerships and corporations in the same amount

as the participating physicians. Again, however, the absence of this 20-25 per cent surcharge will result in hundreds of thousands of dollars in savings to participating physicians. For years the OSMA has attempted to convince INA to drop this surcharge but was unsuccessful.

Q. We have always been told that insurance rates in Oklahoma were among the lowest in the country. Why then the change from the Insurance Company of North America/Lloyd's of London/Glacier General to the Hartford Insurance Company?

A. The INA program was one of the best in the country, and the OSMA quite frankly was very reluctant to switch insurance carriers. After very careful inspection, however, it became apparent that the change was called for. The Hartford program offered insurance coverage up to \$5 million, which the INA proposal originally did not. The Hartford program eliminated the partnership and corporation surcharge which the INA proposal originally did not. Additionally, the rates offered by the Hartford are approximately 9 per cent lower than those offered by INA. This savings, coupled with the absence of a partnership/corporation surcharge, represents an approximately 31 per cent savings over the program submitted by the INA . . . or close to \$1 million.

Q. I have heard that we had a good and stable relationship with the INA and that our insurance committee had much to say about how this program was administered and underwritten. What will it be like under the Hartford?

A. The OSMA had an excellent relationship with INA and hopes and expects to establish a similar relationship with the Hartford. The Hartford has assured us that the OSMA Insurance Committee will play an important role in the administration/underwriting of this new program. There is a contractual agreement for the OSMA to institute a risk management program which the Hartford will assist in setting up.

Q. If I choose to select \$1 million in coverage, do I add the first and second columns together to determine how much I pay?

A. No! If you choose \$1 million in coverage, you pay only the amount listed in that column. This year all insurance is with the Hartford, so it is not necessary to purchase both the basic

coverage and the excess limits in order to be insured for up to \$1 million. The same is true for the other three layers of insurance . . . you pay only the amount listed under the amount of insurance desired.

Q. Who will service this program; how will I get my insurance; when will my new policy be issued?

A. As in the past the OSMA-sponsored professional liability insurance program will be jointly administered and serviced by your state medical association and by C. L. Frates & Co. in Oklahoma City. Coverage will be available through more than 200 Hartford agents, or through your current agent. It is hoped that policies will be issued to all OSMA members in early December.

Q. Now that my association-sponsored insurance no longer includes items such as premises liability, homeowners, etc., where should I purchase this insurance?

A. You may purchase this insurance from any of the various companies offering this type of coverage.

Q. Now that we have switched from INA/Lloyd's of London/Glacier General, what will happen to that insurance?

A. Since this was occurrence type insurance, the policies will remain in effect until the Statute of Limitations has run. Although your insurance will no longer be through these three companies, they will still be responsible for any claims brought as a result of events occurring during the calendar year 1977.

Q. I understand one of the principal reasons the OSMA program has been so successful is that Oklahoma doctors were rated on Oklahoma experience and not national averages. Is this true, and if so, will the Hartford follow the same guidelines?

A. In the past the OSMA program has been rated largely upon Oklahoma experience and this has contributed significantly to the good program here. Obviously there are advantages to rating professional liability insurance on the relatively good experience we have had in Oklahoma as compared to the somewhat volatile atmosphere experienced by states such as New York and California. This was discussed at length with the Hartford prior to acceptance of their proposal, and they have agreed to follow essentially the same guidelines in rating the new program in the coming years. □



OSMA President Dr. C. S. Lewis, Jr. has been named by Governor David L. Boren to the Emergency Medical Services Advisory Council.

Government Contributes Much To Medicaid Financial Woes

Over \$2 billion a year in Medicaid funds is wasted because of welfare agency mismanagement and not because of provider abuse, says HEW Secretary Joseph Califano. Citing a recent HEW study, Califano said that errors by the 21.6 million poor persons receiving Medicaid services are declining, while errors by agencies administering the services are rising. Califano said Medicaid misspending is more than twice as much as the \$1 billion a year the HEW Department previously estimated. During fiscal year 1977 at least \$1.2 billion was paid for services to persons who were ineligible, while \$200 million was lost through duplicate payments, overpayments, and payments to ineligible providers.

Another \$600 million was lost through government failure to collect from third party payers and worker compensation funds, Califano said. □

AMA To Work on Cost Control Measure

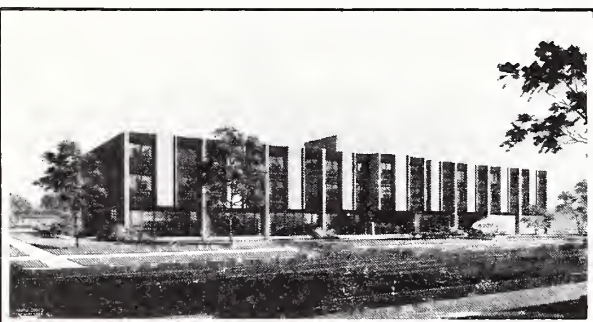
The American Medical Association has accepted a challenge issued on the floor of the US House of Representatives to develop a voluntary hospital cost containment program. Joining the AMA in the effort will be the American Hospital Association and the Federation of American Hospitals. Illinois Democrat Rep. Dan Rostenkowski, Chairman of the House Ways and Means Subcommittee on Health, had said he hoped the private sector would accept a challenge "to develop a meaningful program of cost containment. Government intervention and the imposition of control should be a last resort," he said.

Rostenkowski said other high priority legislation as well as dissatisfaction among members with the aspects of the administration's hospital cost containment bill, (HR 6575), "have precluded my subcommittee from completing its consideration of possible solutions to the health cost escalation problem . . . the period between now and the reconvening of Congress in January can be well spent by both

the Administration and the hospital industry in determining the best direction to take."

One day later, top officials from the AMA, AHA and the FAH said: "Our three organizations, at the instruction of our respective officers, are beginning now to organize a national steering committee of hospital people, doctors, insurers, consumers and others with a major stake in hospital cost containment. We will ask this committee . . . to develop the methods and mechanisms, first, with a voluntary program to reduce the rate of increase in hospital costs, and second, a voluntary program to reduce the rate of increase in health care costs as a whole. We will also encourage the development of similar steering committees at the state level to implement these programs."

"We believe," said the statement, "that voluntary restraint by hospitals and doctors is the most equitable method to achieve effective cost containment consistent with sound medical practice and with the least disruption to patient care. It is our strong belief that our efforts will be successful, and it is our hope that it will then become unnecessary to impose a new bureaucratic control system that could impair existing efforts to provide better health care for all Americans at an acceptable price." □



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Attorney General May See Patient's Medical Records

The physician-patient privilege does not prevent a court from granting the New Hampshire Attorney General access to the medical records of a state hospital patient, the New Hampshire Supreme Court has ruled.

In May 1970, the mental patient was committed to the hospital after pleading not guilty by reason of insanity to charges of arson and attempted arson. Under state law, the patient's commitment had to be reviewed later to determine whether he was still too dangerous to be at large. Since the State had to prove that the patient's commitment should be continued, the Attorney General sought access to his medical records.

A trial court granted the motion, and the Supreme Court affirmed. The physician-patient and psychologist-patient privileges were not absolute and would yield to discovery of essential information, the court said. Information bearing on the patient's dangerousness was essential and should be disclosed. The

court, however, limited the use of the information in the medical records to this hearing and said that any admissions could not be used against the patient except as they concerned his continued confinement. □

Higher Medicare Deductible Announced

HEW Secretary Joseph Califano has announced that the inpatient hospital deductible under Part A of Medicare will be increased from \$124 to \$144 for benefit periods beginning in 1978. Notice of the higher deductible and related co-insurance amounts will be published in the *Federal Register*.

The new amounts are effective only with benefit periods starting in 1978. The current \$124 inpatient hospital deductible and related co-insurance amounts remain in effect for benefit periods which start in 1977, even though the benefit period extends in the 1978 period. □

AMA Considers Oklahoma Resolutions

When the American Medical Association's House of Delegates met in early December to consider business items and policies for the 150,000-member organization, four of the items to be considered were resolutions introduced by the Oklahoma delegation. These resolutions dealt with public relations activities of the AMA; AMA's commitment to PSRO, HSAs, and the Comprehensive Health Insurance Act of 1977; the hostile attitude exhibited by HEW Secretary Joseph Califano during the June AMA meeting; federal reimbursement under Medicare and Medicaid programs; and the formation of a cancer information sharing network.

Probably the most interesting of the resolutions are the two resolutions introduced concerning the American Medical Association's public relations activities. For over a year now, the officers and staff of the OSMA have worked closely with the AMA in attempting to upgrade and expand PR activities on a national level. A resolution calling upon the AMA to become much more aggressive in its public relations and to commit an additional \$450,000 to these efforts was introduced at the June, 1977, AMA meeting in San Francisco. Although this resolution was turned down in reference committee, alternate AMA delegate, Dr. M. Joe Crosthwait, Midwest City, submitted a substitute resolution on the floor of the House of Delegates during the closing session. Although this particular resolution received the endorsement on the floor of the Kansas delegation and the Illinois delegation plus the backing of other states such as Ohio and Louisiana, Dr. Crosthwait and the Oklahoma delegation agreed to another substitute resolution submitted by Dr. Joseph Boyle, California. This resolution called upon the American Medical Association to devise a PR game plan and to make details available to the various state societies as soon as possible . . . no later than 60-90 days after the AMA June meeting closed. Since this information had not been received prior to the deadline for submitting resolutions to the winter House of Delegates meeting, the Oklahoma delegation introduced two public relations resolutions for consideration. One carried with it instructions about establishing a priority PR program, and the other commended the

AMA for the program it had put together. One of the two resolutions was to be withdrawn, depending upon the information received by the AMA.

Approximately one month before the December meeting opened, the OSMA received word that the AMA PR Division had been reorganized and made accountable to the Executive Vice-President, Dr. James H. Sammons, through his assistant, Ted R. Chilcoat.

The new AMA program calls for both more aggressive public relations and the initiation of an institutional advertising campaign. Details are not yet available on the ad campaign, but apparently magazine ads directed at national opinion leaders will be emphasized. The AMA program also calls for additional efforts in placing medical spokesmen on national talk shows, etc. and also instructs the AMA staff to improve its relations with media editorial personnel. One important part of the program is that state and metropolitan county medical societies will be dealt with more closely, and the aid, advice and assistance of these societies is to be solicited.

The AMA program called for approximately \$1.5 million to be spent on public relations during 1978.

At press time no decision had been made as to which of the PR resolutions would be withdrawn and which would be introduced.

One of the other resolutions called for the federal government to reimburse in full for expenditures under federally-financed health insurance programs. It pointed out that millions of Americans are now dependent upon these programs, and that the medical profession provides vital medical services under Medicare, Medicaid, etc. The resolution also points out that the cost of these programs has grown predictably due largely to additional beneficiaries, inflation, etc. The resolution says it is unfair to force hospitals, etc. to pass on costs to private paying patients because the federal government refuses to accept all the costs under these programs.

The two other resolutions introduced by Oklahoma call for 1) The AMA through a blue-ribbon commission or ad hoc committee to serve as an umbrella to correlate and computerize various information regarding research programs designed to find cures for cancer, and 2) the AMA to rescind its commitment to PSRO, HSA and the Comprehensive Health Insurance Act. □

North Carolina-AMA Lawsuit Rejected

On September 22, a three-judge federal district court in Raleigh, North Carolina, rejected a lawsuit brought by the state of North Carolina and the American Medical Association challenging the 1974 National Health Planning and Resources Development Act (PL 93-641).

North Carolina claimed that the act violated the principles of federalism and state sovereignty in the US Constitution because it required that state to adopt a program which the North Carolina Supreme Court declared in violation of their state constitution. PL 93-641 requires each state to establish a health planning agency, which among other things administers a "certificate of need" program designed to guarantee that only "needed" medical services facilities and organizations are developed.

States must be in compliance by 1980 with the "certificate of need" requirements or they will not be eligible to participate in programs

authorized by the Public Health Service Acts, the Community Mental Health Centers Act, and the Comprehensive Alcohol Abuse and Alcoholism Prevention Treatment and Rehabilitation Act of 1970. In 1973 the North Carolina Supreme Court ruled the "certificate of need" statute "in excess of the constitutional power of the legislature." North Carolina, therefore, argued to the federal court that the state would be compelled to amend its own constitution in order to conform with PL 93-641, and that the requirements were not simply an inducement on the part of the federal government but rather coercive. The American Medical Association further charged that the act interfered with the patient-doctor relationship. The North Carolina federal district court, however, decided against North Carolina-AMA and in favor of PL 93-641.

It is felt certain that the decision will be appealed to the United States Supreme Court.

Oklahoma is in compliance with this regulation and has established a statewide HSA Board with six HSA subarea councils. □

BOOK REVIEWS

Infectious Diseases of the Fetus and Newborn Infant J. S. Remington & J. O. Klein (ed), 1,121 pages, Philadelphia: W. B. Saunders Company, 1976. \$45.00

This book deals with infections of the fetus and newborn infant including those acquired *in utero*, during the delivery process and the early months of life. Its size (more than 1,100 pages) testifies to the importance and expansion of the importance of infections in the perinatal period.

The book is divided into twenty chapters. Each chapter covers the pathophysiology, epidemiology, diagnosis and differential diagnosis and, if pertinent, treatment and prevention of the infection. Virtually every chapter is accompanied by excellent tables and figures and the reference lists comprehensive and pertinent. The chapter titles range from various viral infections such as rubella, cytomegalovirus, herpes simplex, all bacterial infections including tuberculosis and syphilis. Like any textbook, it is slightly dated by the time of publication and there are certain points which are not covered such as the problem of recurrences and relapses of group B streptococ-

cal infections of the newborn infant. There are also certain points regarding antimicrobial therapy with which argument can be taken. All in all, however, the sections on antimicrobial therapy are well done.

This is an excellent book which will prove to be a valuable reference for all concerned with perinatal infections. Its greatest drawback is its price. *Harris D. Riley, Jr., MD*

Polypeptide Hormones; Molecular and Cellular Aspects, Ciba Foundations Symposium 41 (new series), 388 pages, Elsevier Company, Amsterdam, 1976, price \$27.75.

This symposium reviews prohormones, their conversion into active forms, the heterogeneity of circulating peptide hormones and hormone receptor interactions. Specific polypeptide hormones discussed include insulin, glucagon, growth hormone, parathyroid hormone, gastrin and somatostatin. Like other Ciba Symposia, a valuable part is the discussion at the end of each chapter. For workers in the field this will be a useful compilation of facts. *Harris D. Riley, Jr., MD*

If You Want to Be A Doctor but Don't Have the Money Here's How, Roy Lee Smith, MD Hicksville, New York, Exposition Press, 1975, 48 pages, price \$4.00.

The catching title of this small book belies its contents. It is actually an autobiography of Dr Smith which incidentally tells that he worked at a variety of jobs to assist in paying his way

through college and medical school, a fact well known to myriads of students. Dr Smith, a urologist, was born in Indiana in 1893 and graduated from the Indiana University School of Medicine in 1917. The six chapters review his career from boyhood, his medical training, his military service with vignettes of his medical practice. Unfortunately the book gives no new ideas of how to get through medical school without financial resources. *Harris D. Riley, Jr., MD* □

Miscellaneous Advertisements

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Continuing Medical Education

EDITOR'S NOTE: On January 1, 1978, continuing medical education will become a requirement for membership in the Oklahoma State Medical Association. This program was approved at the 1976 OSMA House of Delegates meeting, and the Council on Medical Education, along with other organizations, has worked on the logistics of this program for the past two years. In an effort to assist OSMA members in fulfilling these requirements, The Journal of the Oklahoma State Medical Association will now list CME offerings in this state each month. All CME courses received in this office prior to press time are shown below. Program Directors may be consulted to determine AMA category classification of courses.

DECEMBER, 1977

St. Francis Hospital, Tulsa

For further information contact: Robert G. Tompkins, MD, Medical Director, 6161 South Yale Avenue, Tulsa, Oklahoma 74136

Pediatric Radiology Conference; December 1 and 15, 7:30 a.m.; Dining Room #1.

Newborn Nursery Staff Conference; December 2, 9, 16, 23, 30, 8:00 a.m.; Dining Room #1.

Family Practice Continuing Medical Education Program; December 2, 9, 16, 23, 30, 12:30 p.m.; Oklahoma Room

Tumor Board; December 5, 12, 19, 12:00 noon; Tulsa and Oklahoma Rooms

William K. Warren Research Conferences; December 6, 13, 20, 27, 9:00 a.m. to 10:00 a.m.; Warren Building, 10th floor

Neuropathology Conferences; December 6 and 20, 8:00 a.m.; Lab Classroom

Cardiac Grand Rounds; December 6, 13, 20, 27, 12:15 p.m.; Oklahoma Room

OB/GYN Pediatric Teaching Conference; December 15, 7:30 p.m.; Tulsa Room

Thoracic-Cardiovascular Section; December 17; Follows Surgery Department meeting which begins at 7:30 a.m.; Dining Room #3

St. John Medical Center, Inc., Tulsa

For further information contact C. S. Lewis,

Jr., MD, St. John Medical Center, Inc., 1923 South Utica Avenue, Tulsa, Oklahoma 74104

Medicine Grand Rounds; December 1, 8, 15, 22, 29, 8:00 a.m.; Midway Building

Family Practice Conference; December 1, 8, 15, 22, 29, 12:00 noon; Dining Room #3.

Medicine Death and Discharge Conference; December 2, 9, 16, 23, 30, 8:00 a.m.; Dining Room #3.

Clinical Pathology Rounds; December 2, 9, 16, 23, 30, 7:00 a.m.; 5th Floor Classroom.

Surgery, Morbidity & Mortality Conference; December 2, 12:00 noon; Dining Room #3.

Cardiology Conference; December 2, 12:00 noon; Auditorium

Endocrinology Conference; December 5, 12, 19, 26, 3:30 p.m.; Dining Room #2

Parkland Internal Medicine Grand Rounds; December 6-7, 13-14, 20-21, 27-28, 8:00 a.m.; Dining Room #1.

Acute Medical Conference; December 5, 12:00 noon; ASBCR #1.

Gross Organ Autopsy Conference; December 6, 13, 20, 27, 1:00 p.m.; Morgue.

Tumor Board; December 7, 14, 21, 28, 12:00 noon; Dining Rooms #2 & 3.

Basic Science Lecture; December 7, 14, 21, 28, 8:00 a.m.; 5th Floor Conference Room;

GYN/PATH Conference; December 8, 22, 11:00 a.m.; Dining Room #3.

OB/GYN Grand Rounds; December 8, 8:00 a.m.; Dining Rooms #2 & 3.

OB/GYN Journal Club; December 8, 22, 10:00 a.m.; Dining Room #2.

Pregnancy and the Heart; December 9

Pediatric Grand Rounds; December 13, 8:00 a.m.; Auditorium.

Neuropathology Conference; December 13, 27, 8:00 a.m.; Morgue.

Neuroradiology Conference; December 13, 27, 7:00 a.m.; Dining Room #1.

OB-Complications Conference; December 14, 28, 12:30 p.m.; Dining Room #1.

Manifestations of Endocrine Disease; December 16

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Perinatal Conference; December 26, 12:00 noon; Dining Room #2. □

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(E)—Editorial	(Pic)—Picture
(SA)—Special Articles	(GN)—General News
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